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This magazine is dedicated to the interpretation, in authentic and popular form, with extensive illustration, of geography in its widest sense, first of Canada, then of the rest of the British Commonwealth, and other parts of the world in which Canada has special interest.

The British standard of spelling is adopted, substantially as used by the Dominion Government and taught in most Canadian schools, the precise authority being the Oxford Dictionary as edited in 1929.

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Edinburgh Castle from the Grassmarket. Perched on its stern, precipitous rock, Edinburgh's grim, old fortress dominates the city and recalls many a tale of romance and strife in Scottish history.

Canadian Geographical Journal

Scotland's Capital

By PETER B. M. ROBERTS

EDINBURGH is proud of her beauty, and yet a little embarrassed by it. She is glad to welcome the tourists who in ever-growing numbers come to admire her scenery and to revel in her historical associations.

But a community of half a million souls cannot live by aesthetic attractions and antiquarian interests alone though these have their material value. Industry and commerce are essential and the problem of the city fathers is how these can be developed without marring those features which visitors come from all parts of the world to see.

Modern cities may make such changes as seem good to them without regard to outside opinion, which may comment merely that any change must be for the better. But Edinburgh pays the penalty as well as enjoys the privilege of being the beauty in the family of Scottish cities. Any proposal to alter her appearance becomes a matter of fierce debate.

The position is admirably illustrated by the controversy now raging as to the Calton Hill site. For just over a century a southern spur of the Calton Hill has been occupied by a much be-turreted building, which, it was alleged, American tourists reaching the city from the east mistook for Edinburgh Castle. In point of fact it was a prison. It became "surplus to requirements" in consequence of the erection of a modern establishment on the outskirts of the

city. While it stood, it was derided by the experts as an example of Scots baronial architecture run mad, a meaningless collection of pepper-pots, and so forth. No sooner was its demolition

begun than the correspondence columns of the newspapers were filled with letters bemoaning the disappearance of a familiar feature. Now the question at issue is whether the ground is to be used for a block of offices which will house the Government departments, scattered in about a score of buildings all over the city; for the National Library, now huddled under the Court of Session; for a new Sheriff Court; or for an open space.

The Office of Works architect prepared draft plans, which were condemned by the Scottish Fine Arts Commission, and, on a sketch of them being published, still more emphatically by public opinion, which denounced the proposed building as "a jute factory."

Accordingly, some surprise was excited when the Town Council, which has the last word on the matter, expressed the view that, with some modifications, the official plan might be acceptable. That announcement merely intensified the demand that the plans should be thrown open to competition, as if that were a guarantee of a satisfactory building. It will certainly be a tragedy if what is probably the finest site likely to be vacant for a generation is not worthily



PETER B. M. ROBERTS

a native of Newtyle, Forfarshire, has been on the editorial staff of "The Scotsman", Edinburgh, for 36 years, 25 of these as London correspondent, his present post. He began his journalistic life as a reporter on the "Dundee Advertiser". He has been chairman of the Newspaper Press Fund, the Press Gallery Committee of the British House of Commons, and of the Newspaper Conference.



Alfred G. Buckham photograph.

Edinburgh from the air, showing in the foreground the famous Rock and Castle dominating the city. In the near distance, beyond the drifting smoke of thousands of chimneys, is the eminence known as Arthur's Seat.

filled, but it is safe to predict in advance that whatever is proposed will be condemned by some sections of public opinion.

By the death of Sir Robert Lorimer, R.S.A., a few months ago, we lost the one man in whom the public would have had confidence; his War Memorial at

the Castle and his addition of the "Thistle" chapel to St. Giles Cathedral are recognized as masterpieces, and the Calton site would have given him the opportunity of a lifetime for the exercise of his gifts.

Edinburgh has some claims to be regarded as a pioneer in town-planning.

In her early days military necessity forced it upon her. At the western end of the ridge on which the Old Town stands, the Castle dominated the downward slope eastwards to what is now officially termed the "Palace of Holyrood House," and the population was perched along the two sides of the mile-long hog's-back between these two points. On

communications, and for centuries the only feasible extension was skywards, with the result that storey was perched above storey in "closes" and "pends" which ran at right angles to the main thoroughfare of the "Royal Mile."

Here and there a great noble might have his mansion house—modest enough to judge by those which still survive—



Wm. Ritchie & Sons photograph.

The cathedral church of St. Giles. It was here in 1637 that a woman worshipper, Jenny Geddes, in the days when the members of the congregation carried their own seats to church, threw her stool at the Dean's head in protest at Loud's introduction of a new service book. Robert Louis Stevenson attended this church. On the inner walls are hung the tattered banners of Scottish regiments.

the south was the valley now marked by the line of the Grassmarket and the Cowgate, and on the north the loch which is now occupied by Princes Street Gardens.

The convenience of the site for defence against English raids, strengthened after Flodden by the erection of a town wall, entailed a corresponding difficulty in

but aristocratic families were content to pile themselves up in flats in which, even to-day, when they are regarded as slums, are to be found traces of their former grandeur in panelled walls, moulded ceilings and elaborately-carved mantelpieces. Health says that these buildings ought to go; history insists that they must remain; and the Town



John Knox's House, built by James Mosman, goldsmith to Queen Mary. Here the great reformer lived, and here he died in 1572. Note the corner window, first floor, called the "preaching window," used by John Knox.

Council, remembering the maledictions now heaped on their iconoclastic predecessors, are not to be blamed if they find it difficult to decide between the interest of the past and the claims of the future.

Less than a century and a half ago, when security was no longer doubtful and congestion had become intolerable even according to the low standard of that age, the city broke through its old boundaries. The South Bridge was thrown across the Cowgate and the North Bridge across the valley of the Nor' Loch; "Geordie Drummond's mud brig," now known as the Mound, was formed to give another exit further west, and the citizens were free to spread over the high ground to the north. They were slow enough to avail themselves of the opportunity, and all manner of inducements had to be offered to tempt them to build what are now Princes Street, George Street, Queen Street, St. Andrew Square, Charlotte Square, with their connecting thoroughfares, those "windy parallelograms" which R. L. Stevenson found so trying.

The scheme was not carried out with a boldness worthy of its conception. In the course of time industrial and railway development and other factors were allowed to predominate, and only in the present generation has it been realized how great an opportunity was lost. Public standards fell still lower in the latter half of last century, and great areas of artisan dwellings in Gorgie and Dalry were allowed to spring up under conditions of overcrowding which within a few years will confront the city's rulers with a slum problem as acute as that of the Canongate and the Cowgate.

But Princes Street at least remains. "Only half a street" is alleged to be the jibe of Glasgow visitors. In this case, at least, the half is greater than any whole could possibly be. It is true that the former symmetry of its architecture, which critics called monotony, has long disappeared and notes of discordancy

have been introduced by cinema-houses and ten-cent stores, little in keeping with the dignity which an earlier generation thought appropriate. But who cares for the buildings when these are merely the foil to the glorious panorama to the south?

Some there are who regret that the Nor' Loch was drained, and that the scheme for diverting the Water of Leith so that it might flow round the base of the Castle Rock came to nothing. But the green wooded valley of the Gardens forms a foreground which gives emphasis to the precipitous heights dominated by the Castle.

Whether the scene is more entrancing under a blaze of sunshine or when wisps

of mist blow up from the Forth to add a sense of mystery who shall decide? Perhaps the best impression of it is given in the sonnet-etching of W. E. Henley, that stricken stranger who found some measure of health and happiness within our gates:—

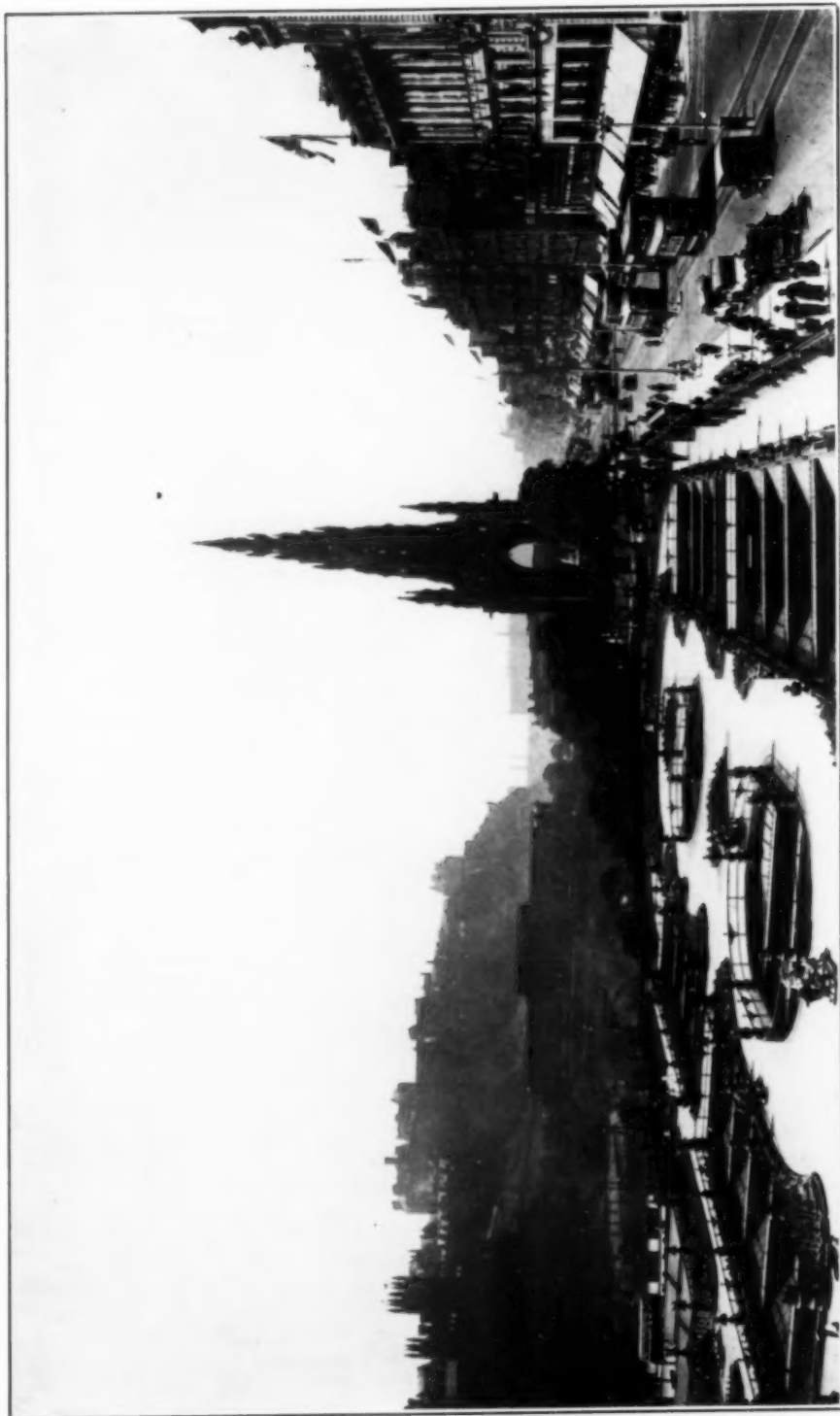
Above the Craggs that
fade and gloom,
Starts the bare knee of
Arthur's Seat;
Ridged high against the
evening bloom,
The Old Town rises, street
on street;

With lamps bejewelled, straight ahead
Like rampired walls the houses lean,
All spired and domed and turreted,
Sheer to the valley's darkling green;
Ranged in mysterious disarray,
The Castle, menacing and austere,
Looms through the lingering last of day;
And in the silver dusk you hear,
Reverberated from crag and scar,
Bold bugles blowing points of war.

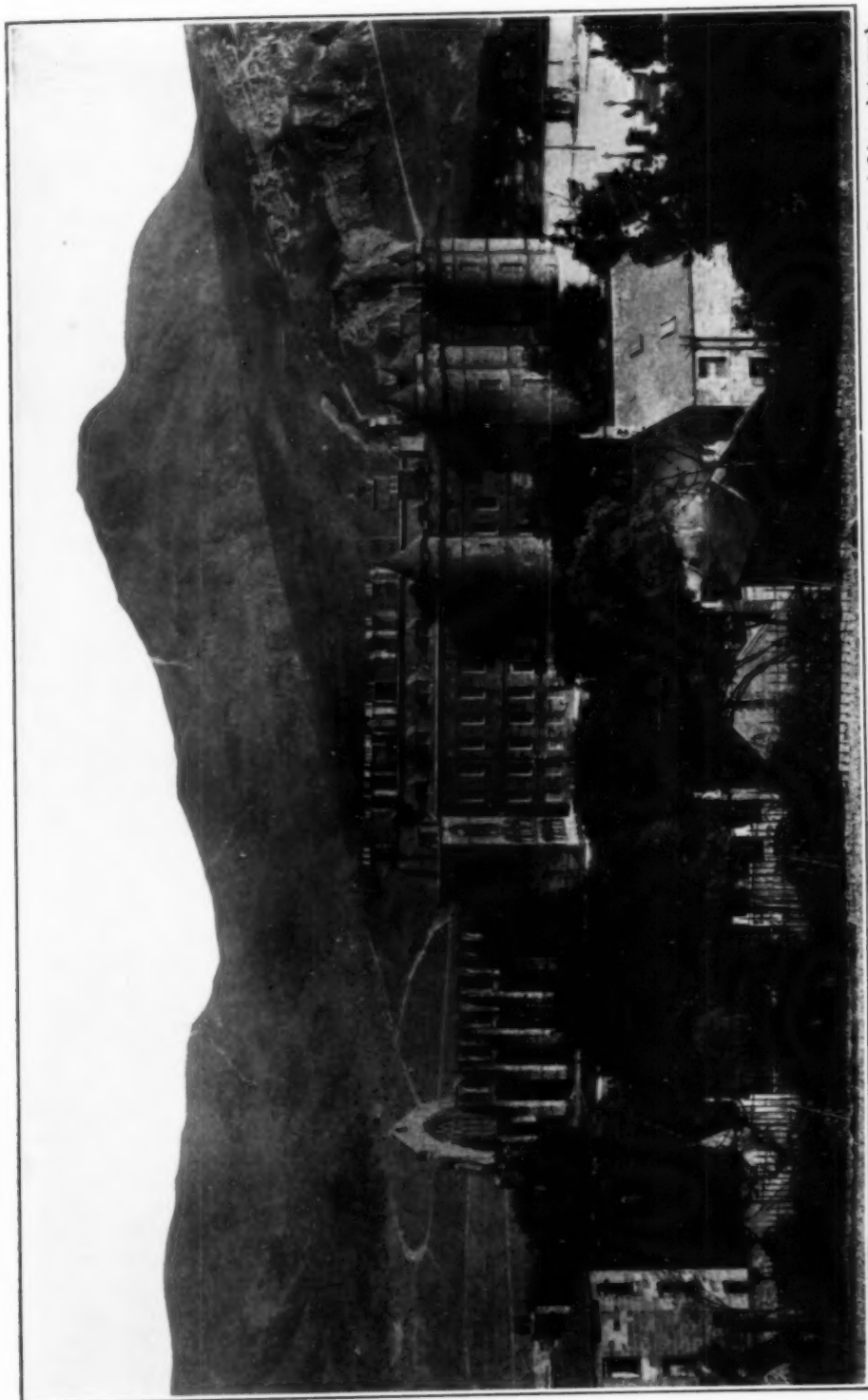
And it was his friend, R. L. S., who, under southern skies, sighed wistfully that "there are no stars in the heavens like Edinburgh street lamps."

But Princes Street does not exhaust the beauties of Edinburgh, any more than the "Royal Mile" comprises all its historic interest. You have to walk only a hundred yards out of Princes Street and you have spread before you the waters of the Forth, with a back-





Princes Street, often credited with being the world's most beautiful city thoroughfare. Part of the public gardens, covering a railway station, are seen in the foreground, with the monument to Sir Walter Scott. The monument is 190 feet high and an observation platform is reached by 287 steps within the tower. To the left, on the hill-top, is the Castle. To the right is the shopping centre.



Holyrood Palace, once the home of Mary Queen of Scots, still used in state ceremonials and occasionally as a Royal residence.

Cunard Line photograph.

ground of the Fife Hills, the Ochils, and, on a clear day, far-off glimpses of the Grampian Range. Architects make pilgrimages to see Charlotte Square—Haig was born in one of its houses—as one of the finest examples of town-planning. Five minutes from the west end of Princes Street, the visitor can find himself on the Dean Bridge, commanding one of the most beautiful urban scenes in Europe—the view down the wooded and precipitous valley of the Water of Leith, its steep cliffs continued upwards by the heights of the houses on either side.

Opinions may legitimately differ as to whether the view of Princes Street from the Castle or of the Castle from Princes Street is preferable. There are those who would settle the question by saying that the outlook from the summit of the Calton Hill is preferable to either, since it takes in both Street and Castle and gives in addition a wide prospect in every direction from the Bass Rock to the Grampians.

But Edinburgh is unique in viewpoints. In what other place of the same size can the citizen by 15 minutes easy walking find himself in a secluded glen like the Hunter's Bog, leading by an easy gradient behind the bluff precipice of the Salisbury Crags to the top of Arthur's Seat (822 feet) with such a panorama as is made up by the Lammermoors, the Moorfoot Hills, the Pentlands, Corstorphine Hill, and the more distant ranges of Fife and Perthshire? One sometimes wonders whether the dwellers in the Scottish capital are conscious of their good fortune or whether custom has staled the infinite variety of their surroundings.

Some months ago the British Broadcasting Company conducted a symposium on the question-begging theme,—

"What is wrong with Scotland?" According to the bright young men who took part in it there is a great deal to deplore.

It did not escape attention that some of the bitterest critics were men who, in the words of John Knox, no longer "comfort their country with their bodily presence." It was odd that from them came the strongest denunciations of the Act of Union as the main reason why Scotland has lost (as they allege) her individuality of character, her educational pre-eminence, her literary standing, and generally those features which entitle a nation to its name.

Waiving the point that but for the Union these self-expatriated critics would have been exercising their talents on a smaller stage, it may be pointed out that Edinburgh's brightest days from the intellectual point of view have been since 1707.

It is interesting, if futile, to speculate in what time and place one would have liked to live. A strong case could be made out for Edinburgh during the last quarter of the 18th century and the first two quarters of the 19th. By the beginning of that period Allan Ramsay and Robert Fergusson

Robertson and Hume had gone, though their influence remained, but in the course of it there flourished,—to take the names at random—Walter Scott, Robert Burns, Christopher North, Jeffrey, Sydney Smith, Brougham, Gibson Lockhart, "Ettrick Shepherd," Raeburn the painter, and a host of others who, as much as its architectural features, earned for the city the title of "Modern Athens."

If Edinburgh is no longer to the same extent the haunt of literary men it is due to the railways rather than the Act of Union. A journey which used to mean 10 days of discomfort can now be

(Continued on page 239)



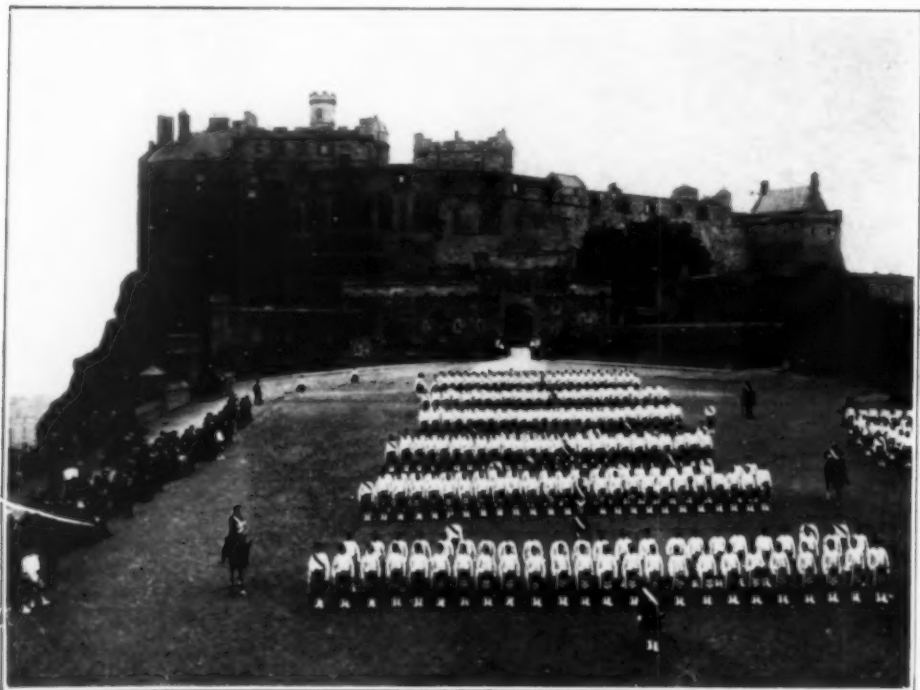
The Scots Greys Memorial, tribute to the heavy cavalry regiment and its grey mounts that together won fame on many a battlefield, immortalized in Lady Butler's Painting, "Scotland Forever!"



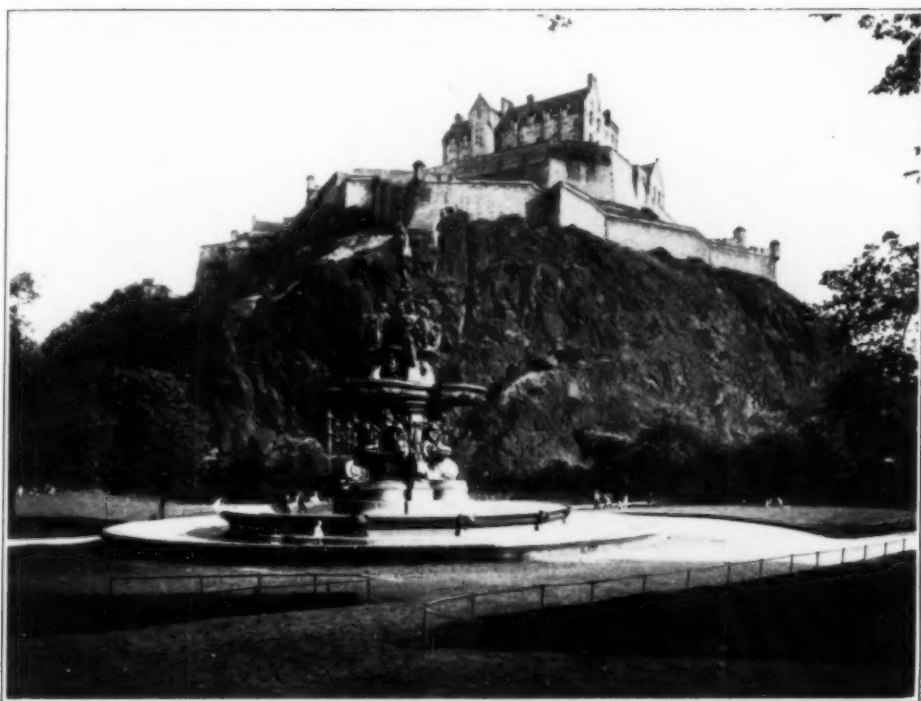
White Horse Close, an ancient hostelry of the 16th century, with vaulted basement used as stables; the rendezvous of Prince Charlie's officers in 1745, later the starting place of the stage coaches for London.



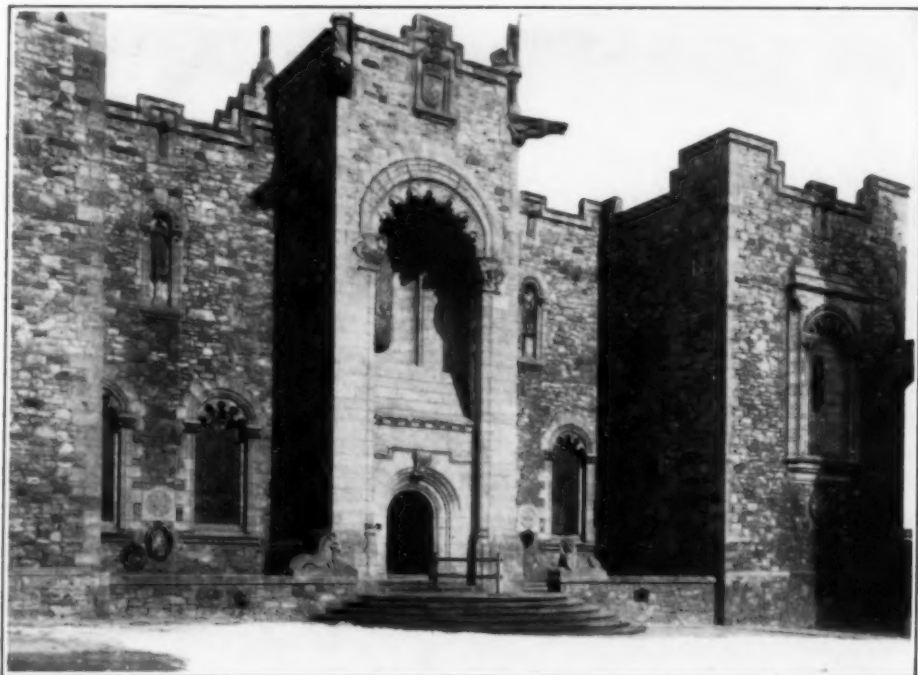
Princes Street, looking east towards Calton Hill, with Waverley station at the right.
Violet Banks photograph.



The Esplanade, or parade ground, in front of the drawbridge and portcullis gate, with the kilted Argyle and Sutherland Highlanders at battalion drill.
Wm. Ritchie & Sons photograph.



A close-up of Edinburgh Rock and Edinburgh Castle.
L.M.S. Railways photograph.



Entrance to south front of Scottish National War Memorial, within the walls of Edinburgh Castle. It has been described as the most imposing war shrine in the world.
Violet Banks photograph.



Canongate Tolbooth—Dated 1591. It was erected early in the reign of James VI for the collection of public dues, and as the Council Chamber of the Ancient Burgh of Canongate. It was used later as a prison for debtors.

(Continued from page 234)

made luxuriously in eight hours, and, like other producers, writers must be near their best market, and the setting up of a Scottish Parliament in Edinburgh would not bring them back. Still it is permissible to look back with regret, and also without repining, to the days so vividly depicted in Cockburn's "Memorials."

Edinburgh remains a capital city, but has an uneasy feeling that she has too little to show for it.

She is the seat of Scottish administration, but her government offices are spattered over the city in makeshift buildings.

She is a military centre, but the garrison which the Act of Union requires to be maintained in the Castle has shrunk to a corporal's guard, while the bulk of the troops are quartered in modern barracks in the suburbs.

She is the seat of justice, but a stranger has some difficulty in finding her law courts, under the lee of St. Giles Cathedral. The judges do their work in a series of undignified coops, but the Parliament Hall, where once the Scottish Estates used to meet and where now bewigged advocates and the solicitors hold their peripatetic consultations, is worth a visit not merely for its history but for the noble collection of Raeburn portraits on its walls. Edinburgh is the headquarters of the Scottish Churches, but with the exception of New College on the Mound its modern buildings are unimpressive, and its old Churches—St. Giles, Greyfriars, St. Cuthbert's—are only now recovered from the subdivision and other mutilations of three centuries.

Above all, Edinburgh is an educational centre; education has been described as her staple industry. Her university, founded by the Town Council in 1582, is the youngest but also the largest in Scotland. Students come from all parts

of the world; probably no other university anywhere has so cosmopolitan an assemblage on its benches. But its original core, the fine building on the South Bridge, has long been outgrown and it has had to put its new buildings where it could, some of them as far away as the slopes of Blackford Hill. Edinburgh may well envy the dominating site which Glasgow University occupies on the heights of Gilmorehill, the quiet charm of King's College, Aberdeen, and the breezy seclusion of St. Andrews, to say nothing of the cloistered quadrangles of Oxford and Cambridge. Our university has had to pay the penalty of rapid

development in a large city, and her undergraduates instead of being grouped in a university quarter are dispersed in lodgings in the tenements of Warrender Park. Many come for the sake of the medical course, which if no longer undisputedly the finest in the world, still stands pre-eminent and in some respects unique. Lister and Simpson, Syme, Turner, Schafer Joseph Bell (the prototype of "Sherlock Holmes") and Stiles are still names to conjure with, and the Royal Infirmary in which they worked is celebrating

its second centenary by a great effort to make the building worthy of their successors.

In the number and fame of its endowed schools Edinburgh is unsurpassed. The £24,000 bequeathed by "Jingling Georgie" to found Heriot's Hospital now produces about double that amount annually for the maintenance of the school and its allied technical institution. George Watson, James Donaldson, James Gillespie and Daniel Stewart enriched their native city by princely gifts—administered with great shrewdness by the Merchant Company of Edinburgh—and in later days Fettes, Merchiston, Loretto and Edinburgh Academy have added to the scholastic as well as the athletic fame of the city. Above





Violet Banks photograph.

The George Heriot School, a noted public school for boys.



"Evening Dispatch" photograph.

The office of "The Scotsman", Edinburgh's oldest daily newspaper. When it was built, in the early years of this century, it was the largest and most efficient of its sort in existence.



Violet Banks photograph.

Old Bakehouse Close showing Huntley House, one of the oldest buildings in the city, and originally an aristocratic residence. The conversion of this building to a city museum is under discussion at the present time. The estimated cost is \$480,000. The word "close" in Scots has a meaning of its own, quite different from that of the humourists. It means a covered entrance to a courtyard.

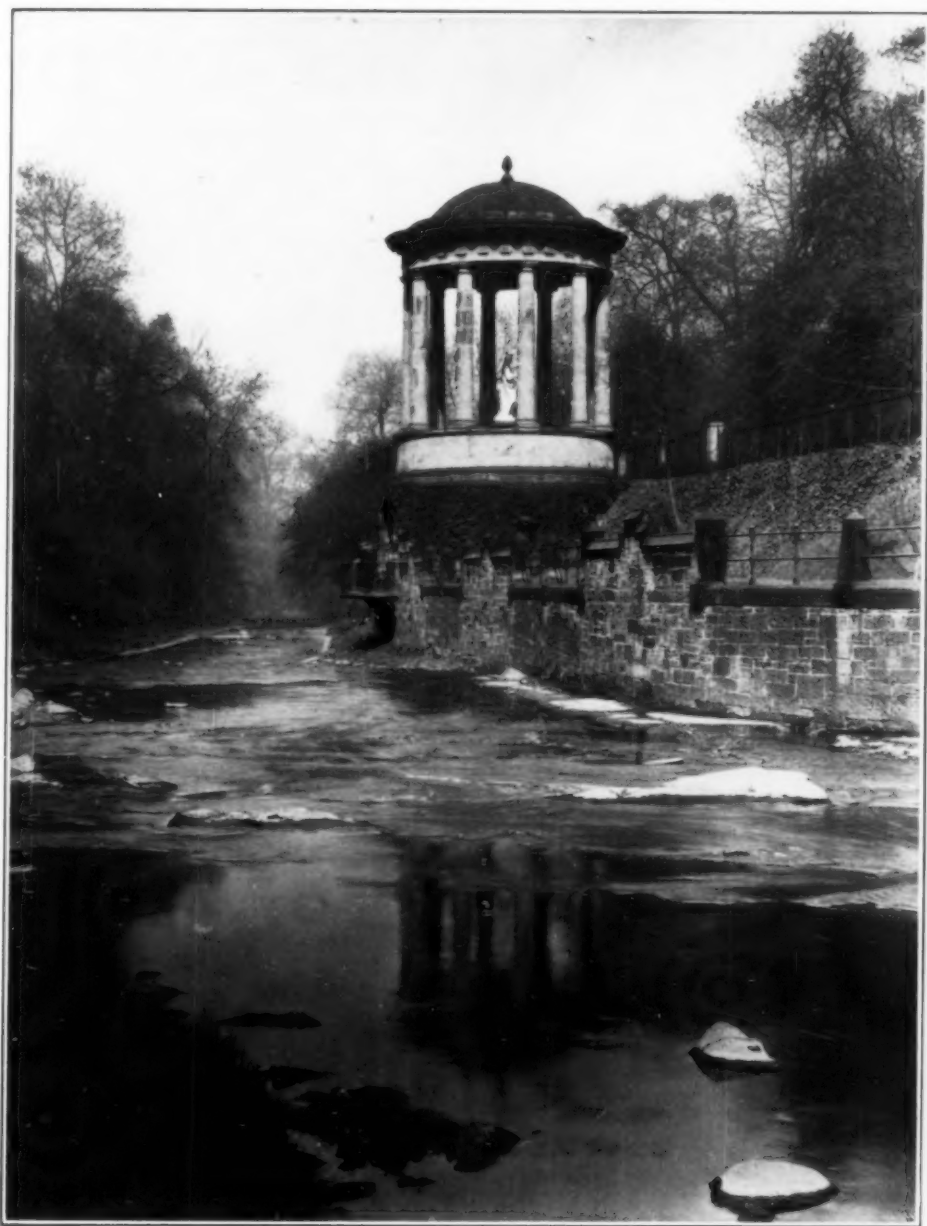


Violet Banks photograph.

The Mercat Cross, standing in the heart of Auld Reekie, faces the City Chambers. The cross was erected at the expense of William Ewart Gladstone. It marks the central cross-roads from which public announcements were made by criers in olden times. The ancient ceremony of reading Royal proclamations is still carried on from the Mercat Cross.

all the Royal High School, founded in 1518 and housed in an exquisite Grecian building on the slopes of the Calton Hill stands as a monument of early municipal zeal for education.

Edinburgh is often regarded as the home of the rentier and the pensioner. But it is much more than that. Its banks may have lost some of their independence through the inter-locking arrange-



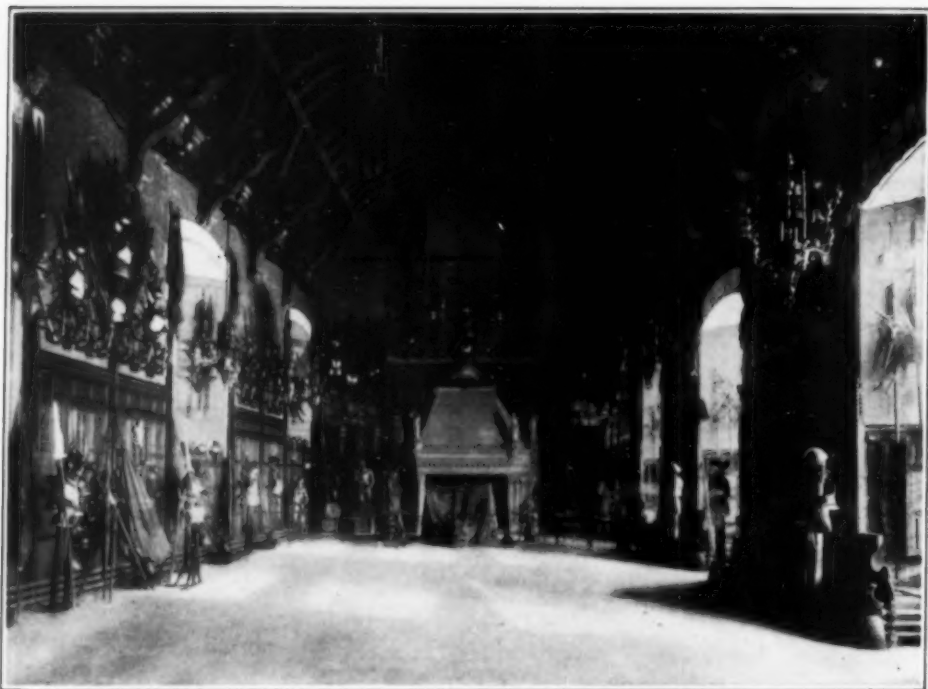
Violet Banks photograph.

The Water of Leith, showing St. Bernard's mineral well.

ments with the great institutions in London, but the connection has worked both ways, and only a few months ago the Royal acquired Drummonds Bank in London, took over the west end business of the Bank of England, and entered into a working arrangement with William's Deacons Bank. Besides,

the Scottish banks form a recruiting ground for the staffs of the overseas financial institutions.

In insurance Edinburgh was a pioneer and remains a leader. The Scottish Widows and the North British and Mercantile are unsurpassed in stability and probity. Incidentally the banks



Wm. Ritchie & Sons photograph.

The armoury and banquet hall of Edinburgh Castle. Fighting men of many generations have used this vaulted chamber and warmed themselves by the great fireplace.



Wm. Ritchie & Sons photograph.

The Royal High School. King Edward VII was one of its famous pupils.



Violet Banks photograph.

The Scottish-American war memorial in Princes Street Gardens, a gift from Scots on the American Continent, particularly in the United States.

and insurance companies have enriched its architectural features by some notable contributions. Edinburgh may not have been first in the organization of the investment trusts which are now so prominent and growing a feature of finance, but it has played a leading part in their development, and thus the citizens have their fingers on the pulse

of international trade to an extent that is not generally realized. Professor Patrick Geddes has estimated that, with the possible exception of the Hague, Edinburgh has a larger fixed income per head of the population than any city in the world, and certainly none has a greater proportion of the leisured class. In the light of that fact it is surprising

that her municipal government has not generally been of a higher standard. Her municipal charter, given by Robert the Bruce, dates from 1329, but it was only with the reform of the municipal corporations less than a century ago that the citizens became effectively self-governing.

It may well be doubted whether democracy has brought increased efficiency, or whether it will do so while men of education and leisure prefer to

Prominent sites have been devoted to common-place purposes, and the important buildings which might have occupied them cannot be transferred without grave inconvenience. The errors of the past can only be repaired by degrees; but that is a reason the more why similar mistakes should not be made now. Accordingly the Calton site is a test case. If Edinburgh allows the erection of an unworthy structure owing to lack of taste or money on the part of the



L.N.E. Railway photograph.

Monument to Admiral Lord Nelson, and "Edinburgh's disgrace" on Calton Hill. The "disgrace" is a monument begun by a patriotic citizen and never finished.

give their public services through such bodies as the Merchant Company or some of the many benevolent organizations rather than run the gauntlet of popular election.

The city, however, is fortunate in its present civic head, Lord Provost Whitson, a man of vision, whose ideal is to see the city re-planned so that its public buildings shall be laid out on some co-ordinated scheme. He would be the first to admit that the task has been undertaken about 150 years too late.

government it may abandon its hope that in course of time its public buildings will be laid out in a fashion both appropriate and impressive.

The other problem, to which the Corporation has directed its attention rather spasmodically, is the development of the city's industries. At present its main activities are the production of books and beer, which it sends all over the world. Edinburgh took to printing in the 16th century, soon after Caxton's day, and though the Scottish



Riddell's Court, Lawnmarket. Here Bailie MacMorran entertained James VI and His Queen "with great solemnity and merriness" at a banquet. Here, also, lived David Hume, the philosopher and historian.



Looking down Princes Street from the Scott Memorial, with the Scottish National Gallery on the left.

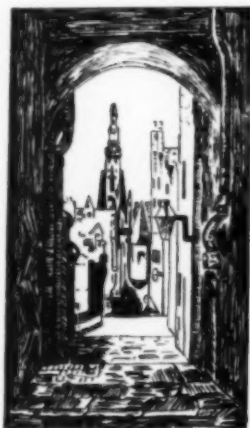
publishers, like the Scottish authors, have transferred their headquarters to London, it is still to Edinburgh that they come when they require either the finest craftsmanship available or printing for the million. It is estimated that three-fourths of the beer consumed in Scotland—a diminishing quantity—is brewed in Edinburgh, and Scotland's whisky production, also declining, is largely directed by the Distillers' Company.

Rubber-works and tanneries provide employment for thousands of workers, and now that the port of Leith is once again within the municipal boundary, shipping, shipbuilding, and the many subsidiary industries which go with them are added to the city's activities. With the steady development of the Fife and Lothian coal-fields, at a time when the production of the western areas has passed its highest point, the Scottish capital may look forward to a

steady growth in its industrial importance, and the mere fact that it has a wide variety of activities, without being too largely dependent on any one of them, is a valuable factor in times of depression like the present. The selection of Portobello as the site of one of the new super-stations for the development of electrical energy is significant.

I have made no attempt to touch on the history of Edinburgh. It is closely interwoven with that of Scotland as a whole. Besides it has been fully set forth by Maitland, Cockburn, Grant, Chambers, and Stevenson, to whom may be added in modern days John Geddie, Miss Rosaline Masson and James Bone. The last named, though a Glasgow man

and resident in London, has interpreted the city's spirit with a subtle and tender sympathy, flavoured by humour and adorned by a literary grace worthy to be compared with that of "R.L.S."



Louisbourg

By JOHN STEWART McLENNAN

A TOWN which became an important centre of trade, which, in fact, by the enterprise of its merchants, and the advantages of its position, enriched the commerce of a Continent by new avenues of exchange; and by the success of its competition, excited the envy and enmity of its rivals; which was adorned with the handsomest public buildings in North America; which was twice captured, victories for the besiegers which restored their spirits, for they were the first British successes of these campaigns; such a town is one of which one naturally thinks as having reached its importance through centuries rather than years.

Yet Louisbourg, of which these things are written, only became a French possession in 1713, was only selected as the Capital of Isle Royale in 1720. After its capture by the British in 1758 its inhabitants were returned to France, and in November, 1760, the demolition of its fortifications was completed, and the town then faded out of existence. Fifty years were all in which history is concerned with Louisbourg, and yet its history is not that of the essential instability of a mining camp, but is that of a brief period in which Louisbourg was twice a piece in the great game of international affairs. One finds in the German Colonies, founded after 1885, carried on with some success, and taken from that Empire by the Peace of Versailles in 1919, a parallel to the events in Isle Royale.

Some condensed explanations of the antecedent situation must be given to make clear the problems faced by the Government of France when the Treaty, made at Utrecht in 1713, ended for an unusually long period, nearly 40 years, the succession of wars between Britain and France.

Insofar as the northern seaboard of America was concerned, by that Treaty, France gave up to Britain Hudson Bay, Newfoundland and Acadia, captured in

1710 by an expedition from New England, and was given the islands in the Gulf of St. Lawrence, the Isle St. Jean (Prince Edward Island) and Cape Breton, the latter by far the more important. It is situated about midway along the fishing banks lying off these coasts, which had even by this time been frequented for many generations by European fishermen. During these years its excellent and numerous harbours were used by them under a *modus vivendi* of their own devising. It was also near the excellent fishing of the Gulf, and it commanded the entrance to its waters, the only passage then used

to Quebec and the back country held by the French. If Britain had held both Newfoundland and Cape Breton in time of war Canada was throttled without any military expedition being sent against it.

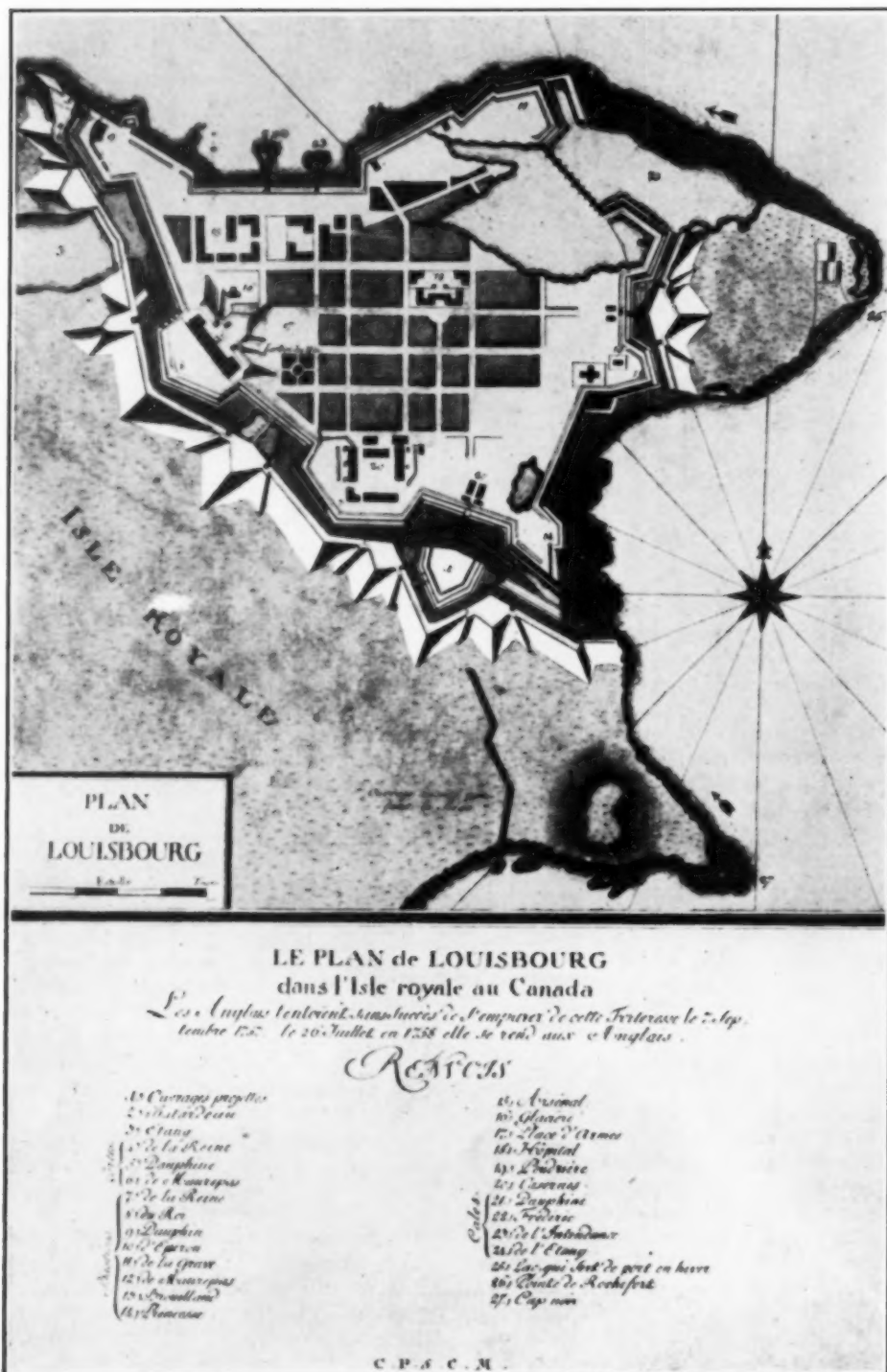
Moreover, brilliant administrators, of whom France possessed so many, fore-

saw that the fur trade would not long support the growing population of Canada. They drew the attention of succeeding ministers to the advantages of Cape Breton as a port of exchange for the commodities of Canada, New England and the West Indies, and described the trade which would spring up from its fisheries, the industries which might be founded on the oaks and coal of its shores so that New France might make headway against the growing population of New England, which had turned from fur-trading to fishing and coastal ventures, as far as Newfoundland to the east, and to the West Indies to the south. It was known before the Treaty was definitely settled that these transfers of territory would be made, so the tasks which confronted Pontchartrain, the Minister of the Navy, in whose charge were the Colonies, were to remove from Placentia in Newfoundland to Cape Breton, the garrison and population with their equipment, to establish the new Colony, and fortify it.

These were the actualities which were

JOHN STEWART
McLENNAN

who has been a member of the Senate of Canada since 1916, was born in Montreal, 1853. Graduated from McGill University and afterwards from Cambridge where he took the Moral Sciences Tripos. He is a Fellow of the Royal Society of Canada, and author of "Louisbourg from its foundation to its fall."



Plan of Louisbourg in 1758. Many plans were published in France, England and Germany, when the capture of the fortress was the great event of that year.

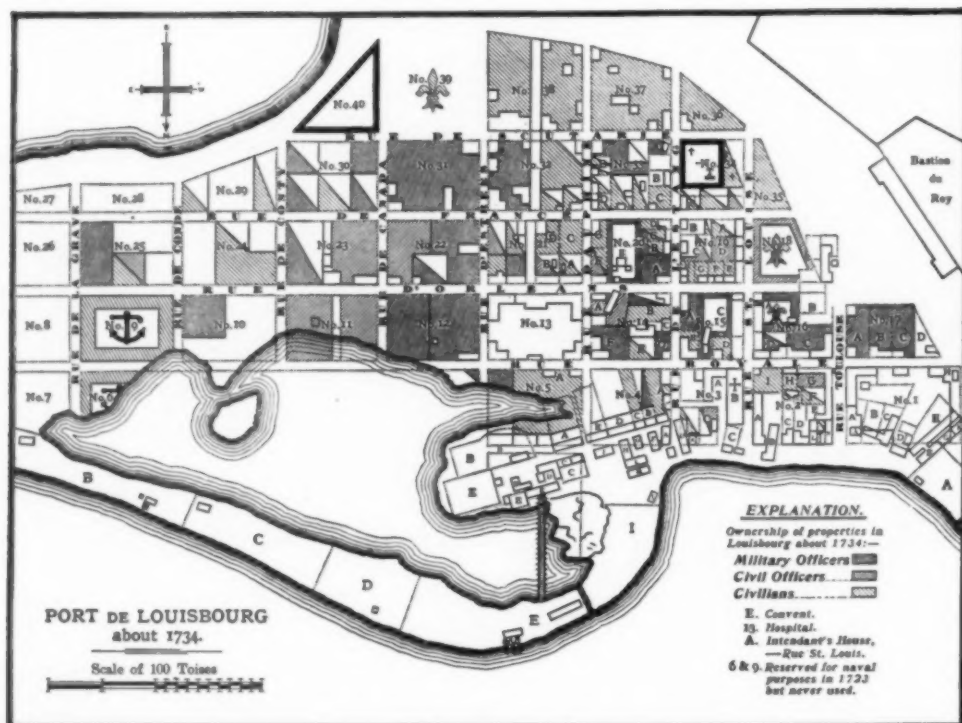


View of the town and harbour made in 1731, by Verrier, Chief Engineer of the town. The original is in the Bibliotheque Nationale, Paris, a facsimile in the Archives, Ottawa.

to be dealt with if France was to retain a foothold on the western seaboard of the Atlantic, and share in the most important of its trades, the fisheries, and the commerce being built thereon. They were to be dealt with under a system which made predominant the interests of the merchants of France rather than those of the colonist, which prohibited trade with foreigners, which laid down regulations by a Minister in France, to be carried out in America for the most part with inadequate supplies of money, men and material. The difficulties inherent in such conditions in an epoch when the only communications were by sailing vessels, when France was exhausted and bankrupt, were many. Pre-eminent amongst these difficulties was the provisioning of the inhabitants of the new colony, the legitimate sources of which were France and Canada, both distant and costly as compared with the produce of a relatively efficient local farming population.

There was a possibility that France might get promptly such a population. About Port Royal and elsewhere in Acadia, mostly on the Bay of Fundy, were 2,400 Acadians who carried on the art of dyking the alluvial lands on its shores, brought from Western France by the earliest settlers, and continued to this day. This population was law-abiding, skilled in agriculture, farming and woodcraft, and would thus make perfect settlers for Cape Breton, and they were permitted by Treaty to remove thither within a year.

Under these circumstances the old regime of France



A composite map showing the ownership of land in 1734, that within the walls being mostly in the possession of military and civil officers.

made its last effort in American colonization.

The expedition to take possession of Cape Breton was sent out on the "Semslack," a vessel of 270 tons, captured from the Dutch in 1703. The instructions were to call at Placentia, Cape Breton and Quebec, returning via Cape Breton to France. St. Ovide de Brouillan, the King's Lieutenant at Placentia, being in command throughout the expedition. Experience at least had qualified him for the task. He had entered the Navy in 1689. His uncle had been Governor of Acadia and Newfoundland, where the nephew served in the local wars, in which he was twice wounded between 1691 and 1710, and was then transferred to sea service on the frigate "La Valeur," received two wounds, was imprisoned in England and was probably sent back to France after the declaration of peace.

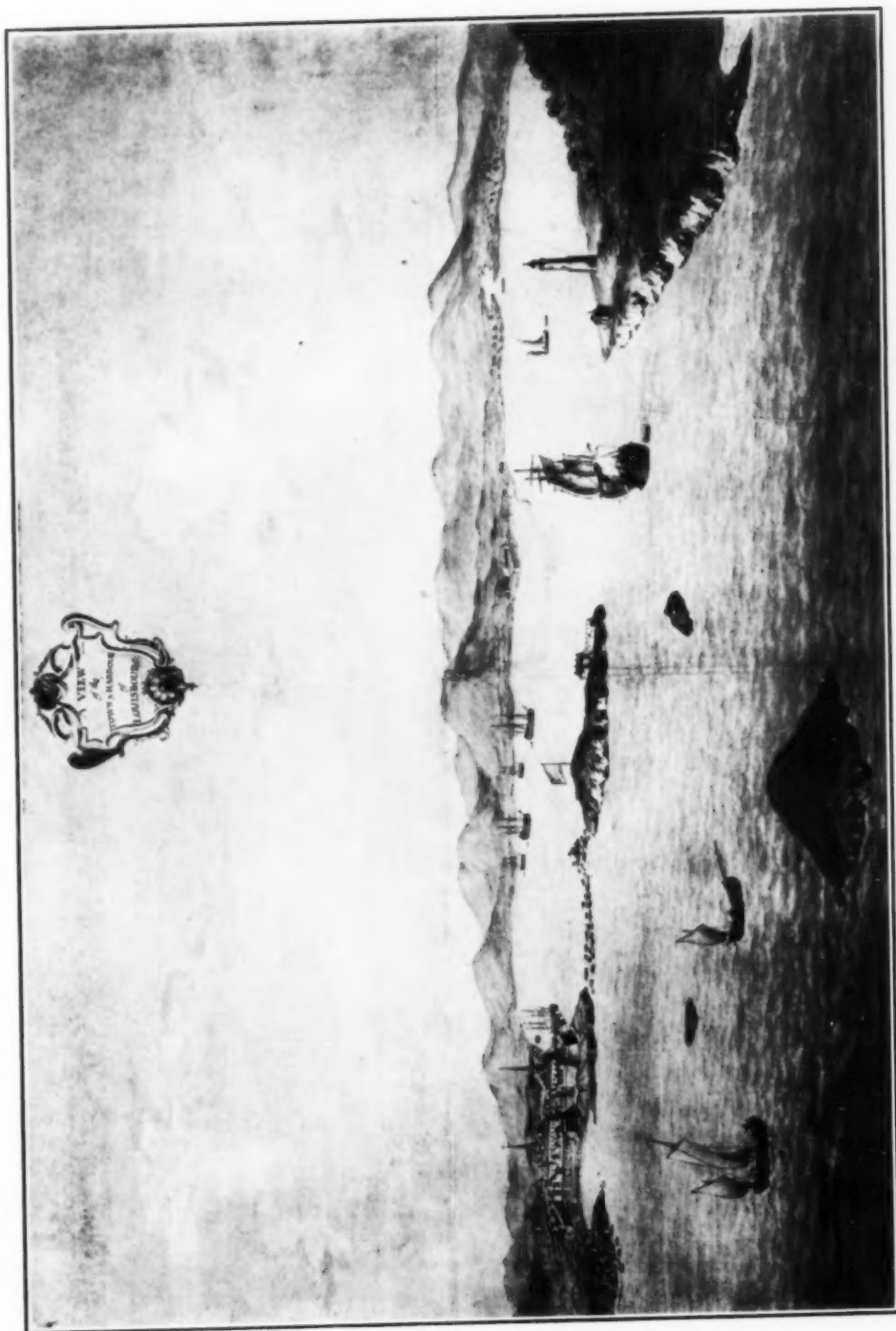
Details of the voyage are incomplete. The "Semslack" called at Placentia, sailed thence on July 23rd, and before

September 2nd had touched at Cape Breton, effected a junction with a vessel sent from Quebec with men and supplies, as the "Semslack" had no time to reach Quebec. On September 2nd possession was taken of the island, leaving with meagre supplies 116 men, 10 women and 23 children as a garrison and civil population of the new colony.

To mark the change of sovereignty the Island was called Isle Royale, English Harbour, Port St. Louis, almost at once changed to Louisbourg, St. Anne's became Port Dauphin, in honour of the heir apparent, St. Peter's Port Toulouse, that no invidious neglect might fall on the distinguished son of Madame de Montespan.

To this work for the map makers, England contributed its share by officially calling Port Royal Annapolis Royal in honour of the Queen, and Acadia was by them now designated Nova Scotia.

Hard winters and insufficient supplies made conditions of life difficult, and progress in the work slow. Costebelle, the Governor of the new colony, came



A view of Louisbourg as it would be seen from the deck of a ship entering its harbour.



Self-explanatory propaganda of 1755.

over from Placentia in 1714, as did its remaining inhabitants. A delegation of two officers was sent to Acadia to interview the inhabitants, and received their almost unanimous promise that they would come to Isle Royale when vessels were sent for them, this being promised by the envoys.

Notwithstanding the difficulties of a new settlement in a wooded wilderness, the new establishment pleased its people and excited forebodings amongst the British. Colonel Vetch, than whom none was more familiar with the country, after the Acadians had promised to emigrate, wrote thus to his home authorities:

the fisherfolk, with Placentia as their standard, saying that "Ye English gave them a wedge of gold for a piece of silver."

Outside of the excellent fishing there were many difficulties. Supplies for building and for sustenance were short, so much so, that in one of these earlier years it seemed as if the Colony would have to be abandoned, at least temporarily; the plans for the fortifications were judged to be extravagant. It had to be hastily fortified against pirates, who captured ships off the coast and threatened a descent on the town. The Minister made a decision that Port Dauphin



A medal struck in 1720 to commemorate the founding and fortification of Louisbourg. This shows the importance attached to these events.

".....so their skill in the Fishery as well as in the soil, must inevitably make that Island (Cape Breton) by such an accession of people, and French, at once the most powerful Colony the French have in America, and of the greatest danger and damage to all the British Colony's as well as the universal trade of Great Britain."

The facts narrated by observers on the spot bear out the forebodings of Vetch. Two Acadians coasting to Louisbourg and beyond, found fishing established in some outports, building going on at Louisbourg, two men-of-war in the port, and the fishing excellent. A New Englander called at Louisbourg, found the fishermen twice loading their boats in a day, 40 vessels loading for overseas, and

should be the chief place, so time was wasted, for only in 1718 it was decided that Louisbourg should be the Capital, and work on its establishment was pressed on with such vigour that in 1720 a medal was struck commemorating its foundation.

The soundness of Vetch's opinions as to the value of local men was justified by the events. The officers and men of the garrison had served before coming to Isle Royale, in Newfoundland, Acadia and Canada. The merchants had been at Placentia and Port Royal. The fisherfolk were carrying on an art, their knowledge of which was hereditary.

Had the 700 people who were at Louisbourg in 1718 been new arrivals from France, or any European country, the

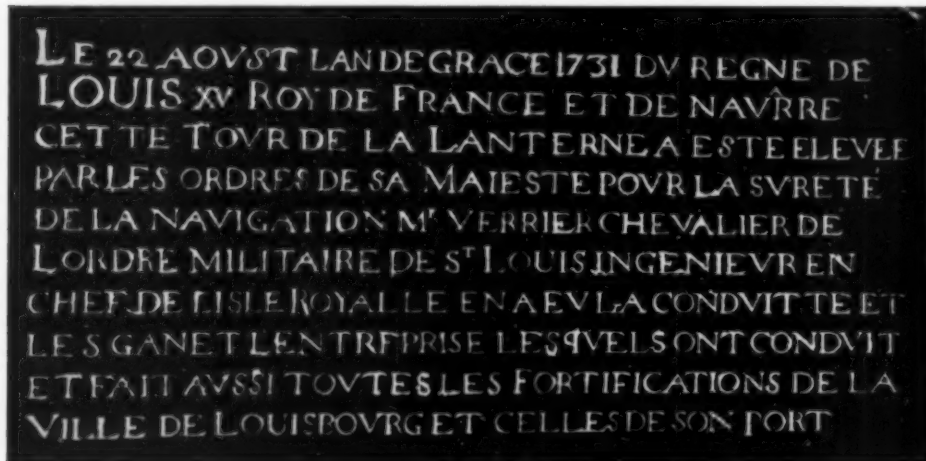
colony would likely have failed. It was only the courage of their leaders, the pertinacity of the people, and those turns of good fortune which come to the courageous and the steadfast that the Colony not only survived, but made progress during those earlier years. Progress was more rapid later, although Isle Royale never got the full benefit of the settlement by the Acadians in any large numbers, for the promises made by the envoys in 1714 were never carried out, and it was only casual boat builders and a few settlers on the land who came in until the very latest years of French rule in the Island. The facts on which

exceeded in the ports of the British Colonies only by Boston, Philadelphia and New York.

Again General Amherst wrote to his successor in 1758:

"I would have the settlements in the different parts of the Island absolutely destroyed. It may be done in a quiet way, but please let them be entirely demolished and for these reasons, that in the flourishing state this Island was growing to, many years would not have passed before the inhabitants would have been sufficient to defend it."

Not only the census taken by the French, but the reports of New England



A lead tablet commemorating the erection of the Lighthouse in 1731 on the eastern side of the harbour. This plate was recently found in erecting the present structure near the site of the old. The plate is now preserved in the wall of the new building. The Lighthouse is shown in more than one of these illustrations.

Douglas, a New England writer, based his opinion, are as follows:

"The French had already the better of us in the fishery trade, and a few years more would have supplied all the markets of Europe, and by under-selling entirely excluded us from cod-fishery which is more beneficial and easier wrought than the Spanish mines of Mexico and Peru."

This view was justified by the relative growths of these fishing industries. The fishing fleet of Marble Head, the most important in New England, was 120 vessels in 1732. In the 15 following years it fell to 70 sail; while Louisbourg's commerce brought to that Port an annual average of about 140 vessels, a number

people show that before 1745 very considerable progress was made. One Englishman, previously an officer in a line regiment, joined the Expedition of 1745, and speaks with high admiration of the beautiful farms on the Mira River, one of them with a stone house with six rooms on a floor "and room in its barns for three score horses and other cattle." There were other evidences that settlements were carried out into the country, and the town itself grew, as did its environs.

The business of the town was seaborne, so at any time during the season of navigation its harbour would have presented a picture of maritime activity.



At the beginning of the siege of 1758 there were in the harbour nine warships. Of these there remained on the 25th of July only two, the Prudent and the Bienfaisant—74's. Expeditions under the command of two junior Captains, Balfour and Laforey, were sent into the harbour on the night of the 25th. They succeeded in surprising the small crews left in the French ships, destroyed the Prudent and towed the Bienfaisant out of range of the French guns. The Port then "lay naked and defenceless," and the town fell soon after.

A NEW SONG Wrote on the taken of LOUISBOURG &c

Spiritoso

Prepare British Boys, your Hearts for new joys, for CAPE-BRETON and

LOUISBOURGH's taken; Our Cannons dire Thunder, has made France knock

S. Chorus

under, and Louis, and Louis has scarce sav'd his bacon.

2

Nor to Gallia alone,
Is our Valour made known,
Ev'ry Nation before us shall fall:
Both the Indies can tell,
What they know but too well,
And Africk, and Africk gives up Senegal.

3

Let the Bullies of France,
Now be slow to advance,
Since our old British courage revives:
When e're wee attack them,
We'el hack them, we'el thwack them,
They never, were never so thwack'd in their lives.

4

Then my Jolly Boys sing,
To GEORGE our great King,
To his Council, his Army, and Navy:
Who have humbled the Monfieurs,
And prov'd them vain bouncers,
And made, and made grand Monarch cry peccavi.

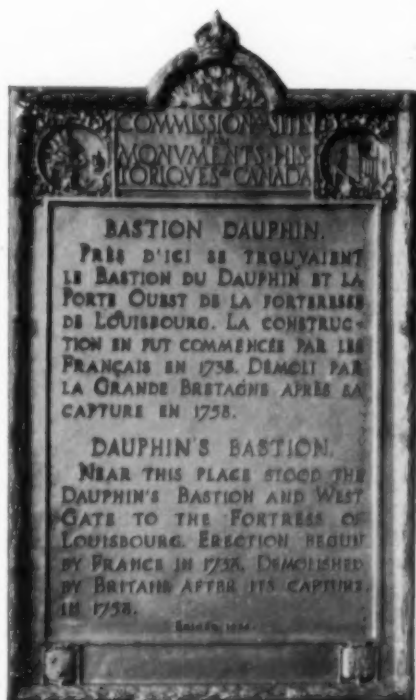
A Broadsheet published in London on receiving the news of the capture of Louisbourg in 1758.

There would be one or more men-of-war swinging at anchor, possibly a great ship after its long voyage from South America or the Pacific refitting before crossing the Western Ocean to France, also scores of vessels laid up for the season while the master traded the cargo brought out from France, and the crew fished to collect a lading for the return voyage.

Among these larger vessels were hundreds of boats engaged in shore fishing for the residents of the town; vessels from Quebec and Nova Scotia others from New England, in many cases new vessels which they sold to the people of Isle Royale and to merchants of the French West Indies; for example, in 1750 New England ship owners sent 30 vessels for sale. Twenty of them were sold to residents, the other 10 to merchants of Louisiana, Martinique, Guadeloupe, and



Column erected on the King's Bastion to commemorate the capture of Louisbourg in 1745 by Colonial forces under Sir William Pepperell in conjunction with the fleet of Sir Peter Warren. The American Society of Colonial Wars which erected this handsome granite monument also struck a medal to mark the occasion.



Tablet erected above Dauphin Gate, the principal entrance to the town. Similar tablets have been placed at the Lighthouse, Wolfe's battery at the Lighthouse, and in August of this year another has been placed to mark the landing of the English troops at Coromandiere Cove, Gabarus Bay.

elsewhere to the south, while the discarded vessels in which they had risked their cargoes of rum and molasses, made cheap bottoms for the large coasting trade of the residents.

With these vessels, requiring overhauling, and nearly every one of them required some repairs, the harbour side was a busy place. Wines, oil, cloths, and sail-cloth, shoes and clothing, came from France; rum and molasses from the West Indies, and flour was the principal importation from Canada, while building materials were staple of the inward New England trade, at least of such of it as was declared. The tonnage of these vessels from the British Colonies shows that the declared trade would not supply an adequate lading; and one is certain that a trade in which vessels cannot find full cargoes would not long continue. The volume of the trade was considerable, some 40 to 70 vessels were from France, about a third as many from Canada, many more from New England, in 1752, 39, of



Philippe Pasteur de Costebelle, who became Governor of Louisbourg on its foundation after long service in Newfoundland, 1692-1714. He was an able officer placed in a difficult position, in which his courage never failed. He died in November, 1717. Our illustration is from a painting in the collection of Dr. J. C. Webster, of Shediac.

which 19 were from Boston, and 24 from the Isles d'Amerique, 10 of them being from Martinique. In times of war 1744-45, and 1755-6-7, were also the privateers, and their prizes. In the last named year these had been so successful in their forays on the Virginian trade that after the French had used hogsheads of leaf tobacco in lavish protection of the fortifications of the town and the men-of-war, so much remained in store that General Amherst was able to sell a part of it for £1,500.

The statistics of Louisbourg's trade, were they given, would seem trifling, and so in a sense inaccurate, in their true significance for we cannot help comparing them with the stupendous business which Canada and New England now carry on, but Louisbourg was, during its latter years, an international port of the first importance. Little incidents show this. It was never troubled by a depreciated paper currency, as were the New England Colonies and Quebec. It was the one place in the north where Spanish gold was current, a great con-

venience to New England traders. Faneuil, the greatest of the Boston merchants of his time, maintained a branch of his business at Canso, and had correspondents in Louisbourg, undoubtedly for carrying on the trade in fish with Mediterranean ports and the Levant, and presumably for irregular importations of French goods into Boston.

Thus was realized, largely through illegal practices, condoned and often shared in by officials, the predictions of Raudot—that brilliant administrator—made at the beginning of the century, who pointed out to the Government that if the new colony was to truly flourish it must have free trade.

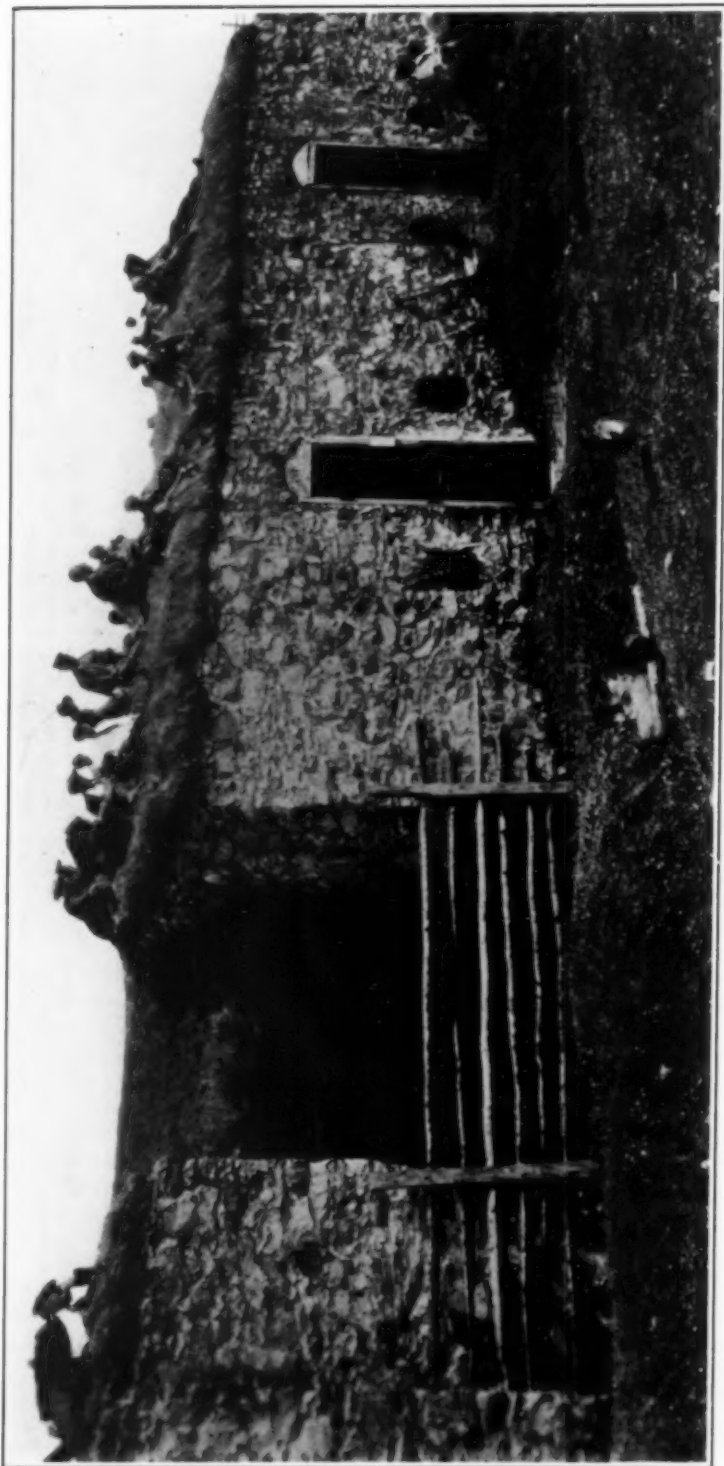
There was developed in Louisbourg a system of government similar to that of the French Colonies, a Governor Commissaire-Ordonnateur, taking the place of the Intendant in the larger colonies, an Admiralty, a Council, and a full staff of officials. Its garrison was made up of *Compagnies Franches*, increasing through the years from six companies to 24, with a simultaneous increase in the number of men in each. There was



The Louisbourg Bell. Chateau de Ramezay, Montreal.



Casemates which occupied the gorge of the King's Bastion or Citadel. Under ordinary circumstances these were used for munitions, but during the sieges when the town was bombarded, they served as refuges to the women and children. On the 22nd of July, 1758, the adjacent building, containing the Governor's apartments and barracks caught on fire and there was considerable danger of the fire reaching the protection which had been placed in front of these casemates, and that the smoke would smother the inmates so that all the women and a great number of little children came out, running to and fro not knowing where to go in the midst of bombs and shells falling on every side, and among them several wounded officers brought out on stretchers with no safe place to put them.



The best preserved remains of the old fortifications.



From an oil painting in the collection of Dr. J. Clarence Webster, of Shediac. It represents in a siege battery several of the principal officers, including Wolfe and Amherst.

in addition an artillery company, a company of the Swiss regiment of Karrer, and in the latest years battalions of Artois, Bourgogne, Cambise and the Foreign Legion.

The officers of these companies were noble. They were for the most part poor, and they had no training in the command of expeditions such as had those in similar positions in the Quebec troops, nor any fighting until their ill-judged expedition of 1744, and yet they conducted themselves with bravery in the siege of 1745. Indeed, in these companies, son succeeded father in most families as officers in the troops in which they were entered, says one caustic critic, "unweaned."

In establishing the works which the garrison was to defend, the Military Engineers, working on the system of Vauban, placed their works where some hillocks ran across the point of land between the harbour and the sea. On the highest of these was the King's Bastion

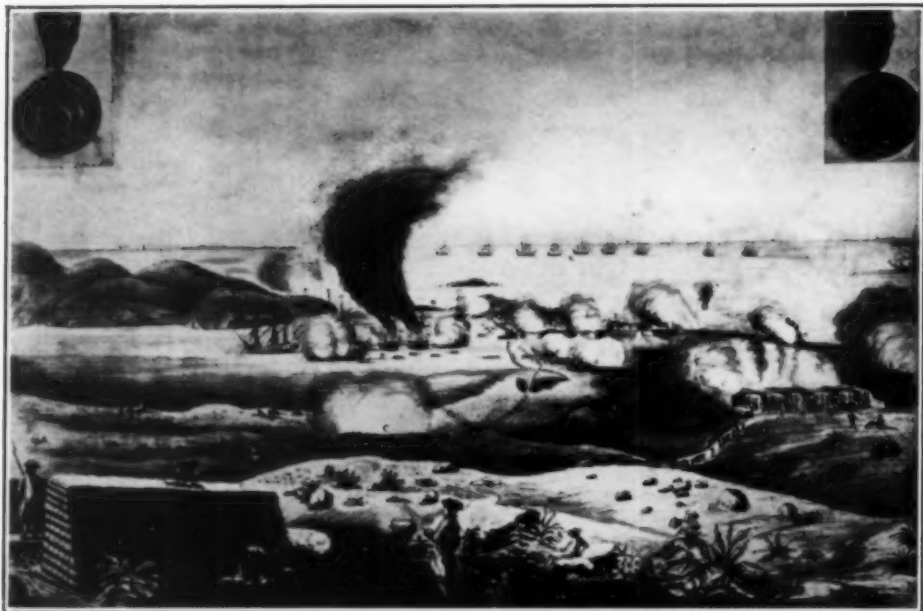
and Citadel, while bastion, demi-bastion, and curtain wall stretched from harbour water to the sea, enclosing the town on the west. On the east were two demi-bastions, beyond them a battery, and on the Island was a still more powerful battery, which in the two sieges, protected, and for long protected effectively, the entrance to the harbour.

There were other batteries, so that Louisbourg was distinctly the most powerful fortress on the Continent, mounting more guns than Quebec.

The sieges of Louisbourg in 1745 and 1758 have been so often described that it seems unnecessary to do more than mention them.

Notwithstanding the social differences between the families of these officers and the merchants of the town, there must have been in so small a place, intercourse between them and marriages were not infrequent.

After the cession these officers were transferred to other colonies, and we



*Burning of French ships in the harbour. On July 21st the *Entreprenant*, the *Celebre* and *Capricieux* were set on fire at their moorings by gun fire, and were destroyed. The above sketch was made from a battery on the west side of the harbour.*

find traces as late as 1830 of the aged daughter of one of the officers who was amongst the earliest to arrive at Louisbourg. It was the same thing with the merchants who made Louisbourg so important a place—for example, the Rodrique family had been at Port Royale before 1710, came to Louisbourg in 1714, removed to France after the first capture, returned, settled in St. Pierre Miquelon after the second capture, and again suffered losses in the capture of that place, and only in 1791 asked for some aid to keep on a business, which, with all these vicissitudes they had conducted for almost a century. Such pertinacity as this suggests the thought that the French peasants, cultivating their land almost under shell fire during the great war displayed in our time a strain long and deeply rooted in their race.

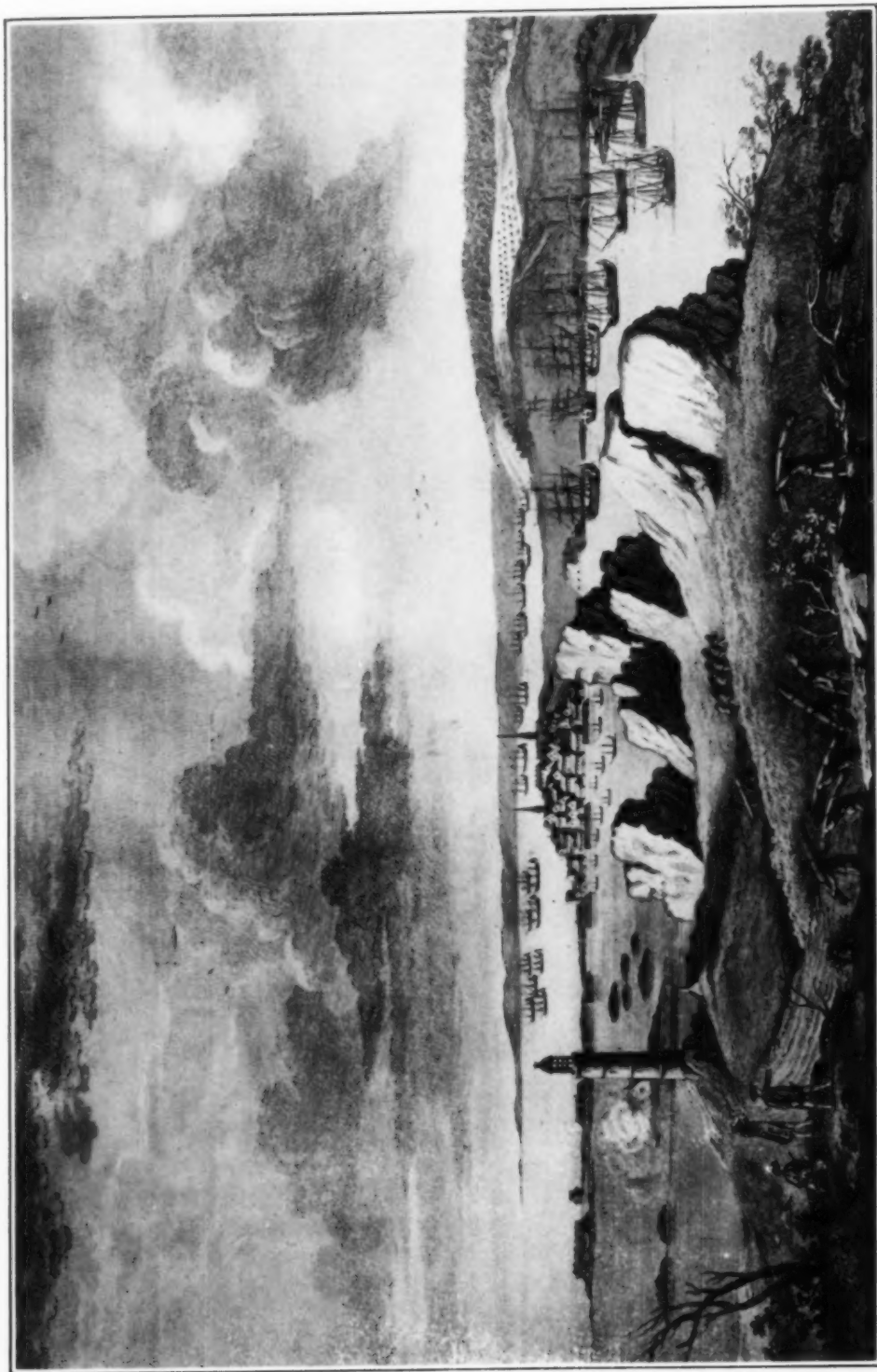
The population of the town was, in 1752, something over 4,000, for the most part living in close quarters within the walls of the town, in about 200 houses. These were mostly wood, some with the first storey of stone, a few entirely of masonry. A large number

of these houses were occupied by military officers and civil officials, others by the principal merchants of the place. D'Ulloa, a Spaniard, returning from South America on a French ship, was captured off Louisbourg in 1745. He says the principal merchants live in the easiest circumstances and was astonished that such an opulent style of living could depend on one industry alone. He thus confirms the testimony of so many British and New England writers who spoke with dismay of the triumphant competition of the French.

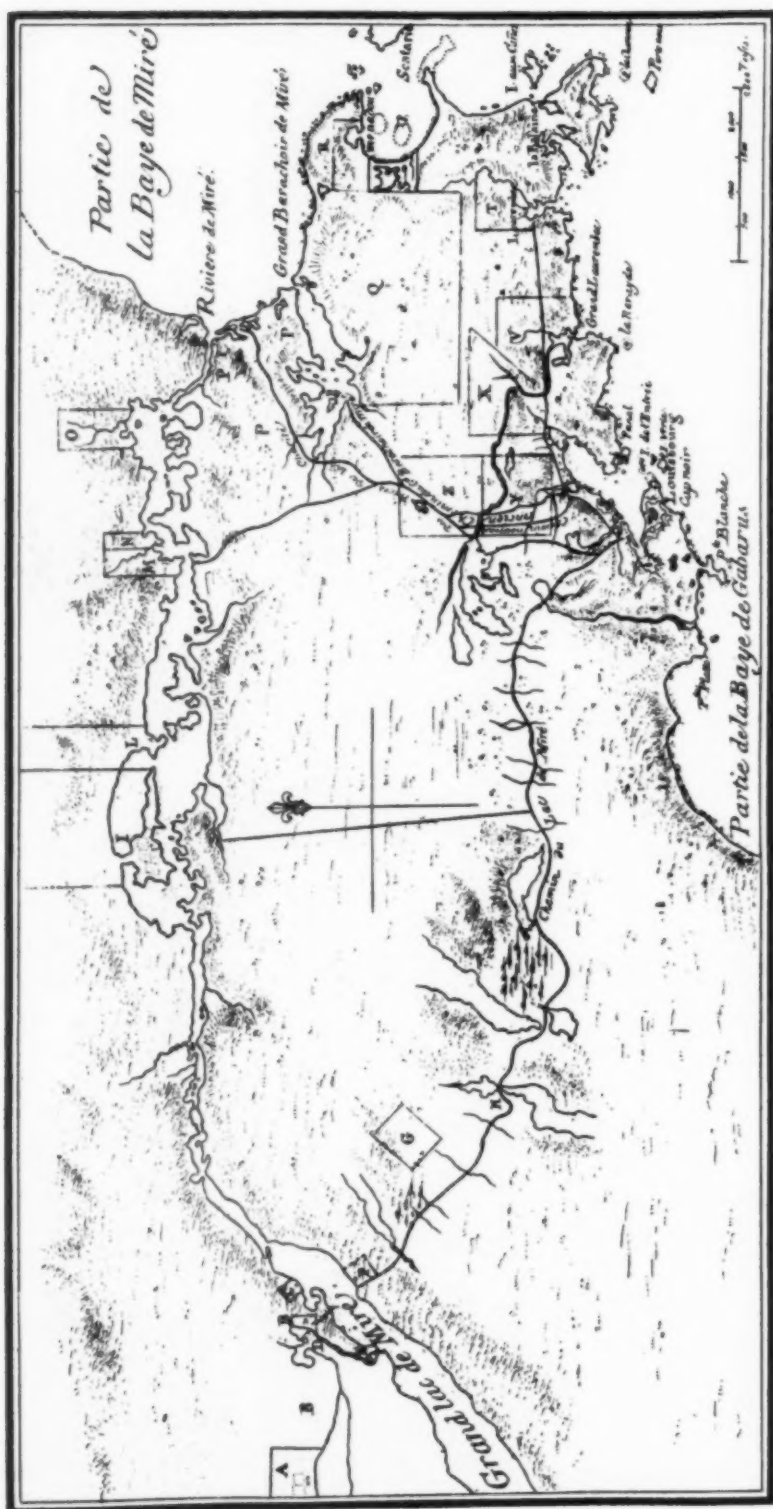
The dwellings and warehouses of the town were overshadowed by the "Government," that great stone building, four storeys high, 400 feet long which closed off the Citadel and dominated the town. Its slender clocktower was a landmark at sea before the lighthouse on the eastern side of the harbour opened up. This lighthouse was the first fire-proof structure of the kind in North America.

These buildings with the imposing hospital in the town might well have impressed the traveller making his first voyage from the West Indies or the

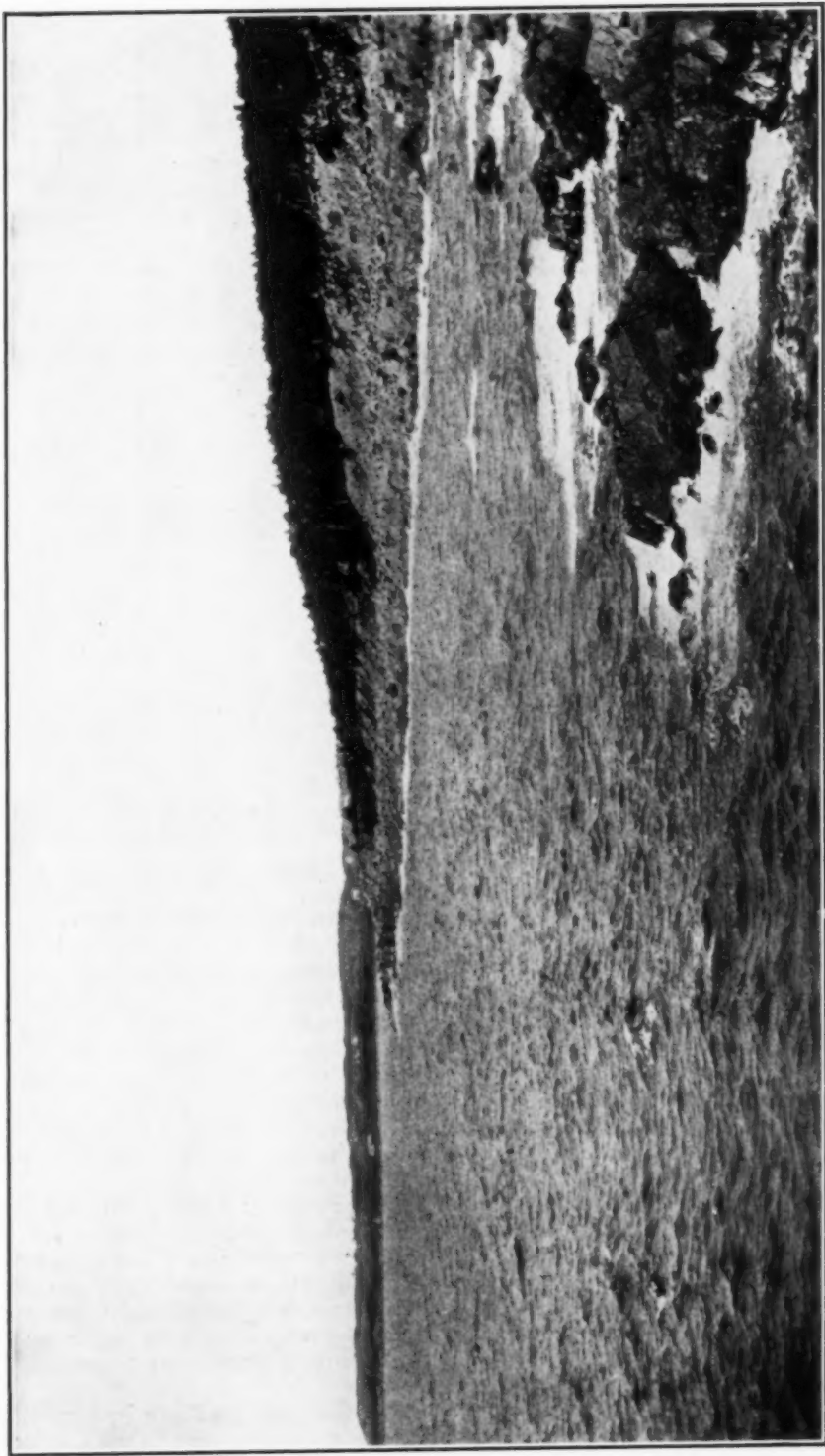
(Continued on page 268)



View of the siege operations of 1758 drawn by Captain Ince of the 35th Regiment, from the high land above the Lighthouse, taken possession of by General Wolfe on June 12th. The silencing of the Island Battery seen beyond the Lighthouse, by permitting entrance to the harbour to the British ships, was the turning point in the two sieges.



A map showing the settlements made by 1738, the roads were good, and in later years extended further to the north. Troops for the strengthening of the garrison marched in from Port Dauphin on the eve of the enemy's landing in June 1758. New England officers spoke highly of the excellence of farms on the Mira.



Coromadiere Cove. Here the British main attack was repulsed. A few boats found a landing out of sight of the French, - and were followed by the others—turning a repulse into a successful surprise.

he was lethargic. But the great mass of colour in these groups was from the white and blue uniforms of the local officers, in somewhat strained relations with the officers of the regulars—Artois and Bourgogne—such as seemed to have been normal in all the Colonies of all countries.

With them would have been the Chevalier Johnstone, a Scotch Jacobite, who, escaping to France after the disasters which befell the army of Prince Charles, then came out as an officer to Louisbourg. He was not ill-pleased at overhearing a brother officer telling a new arrival of how Johnstone had caned on the ramparts near where they were strolling, the Captain of the ship on which Johnstone had come out, who, on the voyage, had been insolent to his passengers. One might have thought as they were passing, Prevost the Commissaire-Ordonnateur, that this story was suggested by his presence, for, although he was a man of ability and long service, he was cordially detested by the naval and military officers, so group after group of them ignored him insofar as they could without an affront to his charming young wife. He might have been pardoned if he thought there was malice in his overhearing so often praises of the ability, the charm, the hospitality of his predecessor, François Bigot, who had been promoted to Quebec, and left there a reputation very different from the record of his intelligent and upright services at Louisbourg.

Madame de Perelle was escorted by one of her sons, and as the first officer's wife who came to Louisbourg, was greatly respected by her friends. She was full of interesting reminiscences, the misery of their first winters when they lived in houses made of pickets, when supplies were meagre and the Colony only saved by the courage of the first Governor, Costebelle; about such officers as St. Denys, "whose flatteries and lies would trouble the

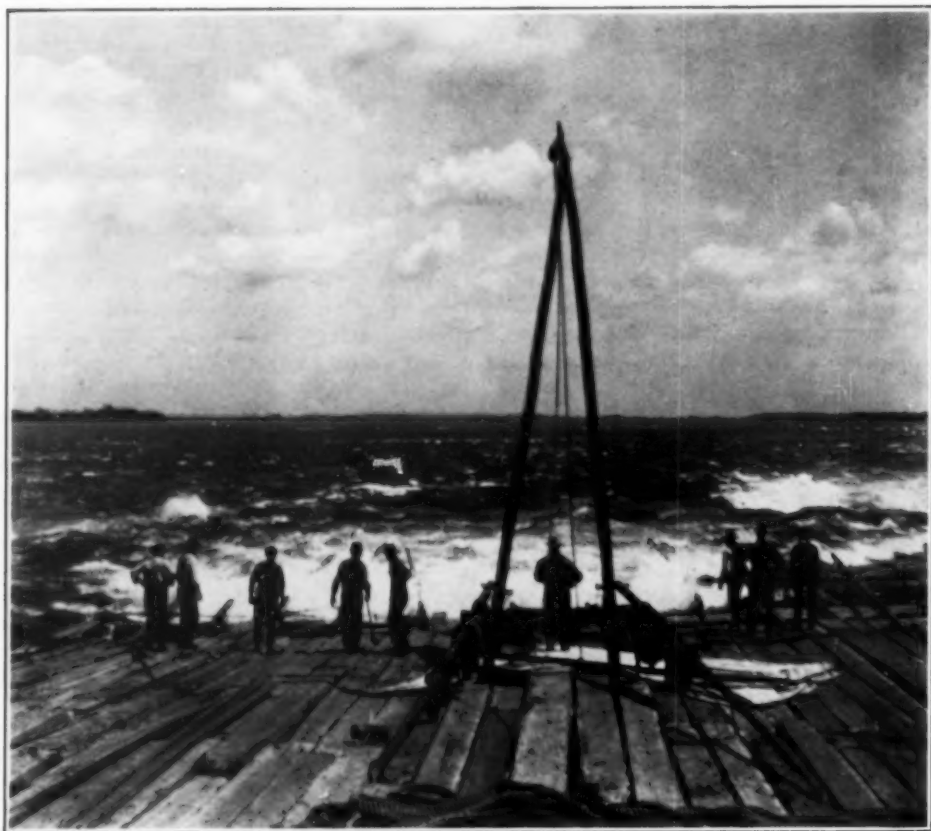
universe," of the change of fortunes of de Mezy once, Commissaire-Ordonnateur, now at the head of the Navy in France; of shipwrecks such as the Chameau; of tempests; of the alarms from pirates; and the horrors of the siege of 1745 little foreseeing that she was to endure another siege and live thereafter more than 20 years.

Some place in the assemblage would have been the Boularderies, neither of them unmindful of the possibility that they might be asked to a meal by some of their friends. He inherited from his father a fair estate which he greatly improved, but was falling now on evil days and straitened circumstances. They finally fell on worse times after their return to France, where, however, they received a small pension with the ignominious condition that they should never approach the Court.

A score of names might be added of people who worthily carried out their work with this background. Amherst and Wolfe, Shirley, Pepperell and Warren, Saunders and James Cook, Forant and Des Herbiere, and above all Jean Vauquelin, so intrepid a sailor and gallant fighter that the annals of no navy hold a name entitled to more honour than his.

The one monument which marks Louisbourg, erected about 30 years ago, is to commemorate the exploits of the New England troops in the siege of 1745. There is abundant documentary material, there are close enough indications on the ground to make it possible to reveal to the visitor something of what existed at Louisbourg, and to convey to him something of the success which its people and its soldiery achieved. These are among the things which it is well for the people of any country to keep before them. The Historic Sites and Monument Board has begun the work of preservation. All lovers of Canada will wish them well.





Dram in main pitch of Coteau Rapids: Note the curve or bend in the whole fabric as it conforms to the shape of the "trough" it is passing through.

Rafting on the St. Lawrence

By D. D. CALVIN

THE last raft of square timber went down the St. Lawrence, running the rapids, in 1911. Rafts had gone down the great river, from ice to ice, every year before this from the earliest days when hewn timber could be "made" close at hand and hauled to its shores. Gradually the supply receded up the tributary rivers, and westward to Lake Ontario and the rivers flowing into it. But "the lake," even in summer, was soon found to be no place for a raft, and schooners began to bring the timber into the headwaters of the St. Lawrence.

As the country along the Great Lakes was settled, the timber was made further and further back from their shores. The tributaries of Lake Erie, Lake St. Clair (much fine oak came down Bear Creek, now the Sydenham River), then Lake Michigan, Lake Huron (particularly Georgian Bay) and finally Lake Superior were in turn invaded by timber vessels, at first schooners then steamers and tow-barges. The timber was loaded off-shore as the vessels lay at anchor or from booms in the bays and river mouths.

At a later period, but while this purely water route was still in full use, timber began to come into various lake ports by rail. Toronto and Hamilton used to handle considerable quantities of pine and hardwood from the western peninsula of Ontario. This rail and water business developed until finally pine came into Duluth from as far west as Idaho and oak into Toledo from as far south as West Virginia, Kentucky and Tennessee.

All of this timber was carried down the lakes in vessels to the bases of the rafting industry in the neighbourhood of

Kingston and there "rafted up" to go down the St. Lawrence to Quebec for export to Great Britain.

The Ottawa River man, if he has read so far, will be saying that when the Ottawa rafts joined in, via the "Back River," below Montreal Island, these upper St. Lawrence rafts were not the whole of the timber which was going to Quebec. True; but the Ottawa raft was a different species, built for different conditions. Most of the Ottawa rapids were passed by slides, and the Ottawa "cribs" which went down them could not safely have run the St. Lawrence rapids. The "drams" of the St. Lawrence rafts were of a much sturdier construction. It may be that this stronger type of raft was evolved in dealing with sinking timber like oak, for all the Ottawa timber was pine.

Nor was rafting on the Ottawa a distinct trade, as it was on the St. Lawrence. An Ottawa raft was usually one man's timber and remained in his hands from the bush right through to Quebec; on the St. Lawrence, especially in later years, rafting was a forwarding business for various owners of timber in widely separated places.

And now we come to describe the St. Lawrence raft itself as it was known for so long to the men who built and navigated it. These men, in later years at any rate, were chiefly French-Canadians from the Coteau Landing area, with some Indians and halfbreeds from the reserves at St. Regis and Caughnawaga. A nucleus of the best men was employed full time, but in the main it was a seasonal employment. A rowdy lot the raftsmen were when they arrived each spring, but



D. D. CALVIN

is a Toronto architect, educated at Woodstock College and Queen's University, graduating in 1902. He was born at Garden Island, Ontario, 1881, eldest son of H. A. Calvin, born at Garden Island, 1851, and grandson of D. D. Calvin, born near Rutland, Vermont, 1798, who established a timber, rafting, shipbuilding and forwarding business at Garden Island in 1836. D. D. Calvin died in 1884. H. A. Calvin carried on the business until 1914, being for many years the last to engage in the timber-rafting trade; since the War he has lived in Toronto. He represented Frontenac in the House of Commons 1892-1896 and 1900-1904; the founder of the business had sat for the same riding in the Ontario Legislature, 1868-1883, and was a close political friend of Sir John A. Macdonald.



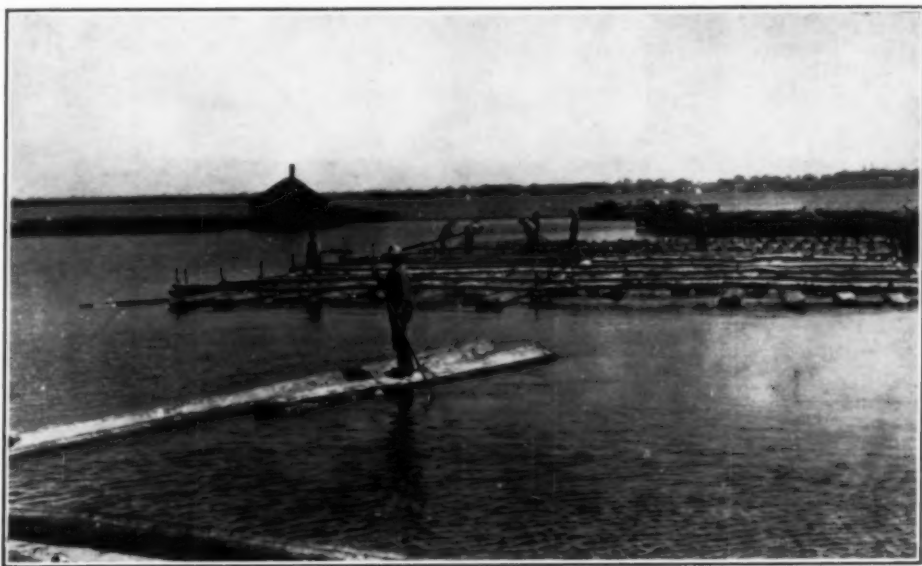
Unloading pine timber at Garden Island. The "ports" were a special feature of the wooden timber vessels.

they soon sobered up and may be seen, in the photographs, at their work.

The photographs were taken in different seasons from 1898 to 1908, but are correct, in the main, for earlier years. The timber was unloaded from the lake vessels by steamwinches ashore, and kept in the boom until it was rafted. The "dram" or unit of the St. Lawrence raft consisted of three tiers; bottom, cross-tier and top-tier. The bottom was made up from the smaller-girthed and longer-lengthed pieces, the cross-tier of the shorter pieces, and the top-tier of the biggest-girthed timber whether long or short. The framework into which the timber was stowed consisted of three pieces longitudinally, jointed each 40 feet, with cross ties (traverses) every 10 feet. The longitudinal pieces were 42 feet long and six inches in diameter at the top, flatted two sides to about seven inches thickness; the traverses were 30 feet long and three inches at the top, not flatted. It should be said in passing that the getting out of these "raft trimmings" was a separate subsidiary of the rafting business. This is also true of the withes and toggles which will



A finished dram; the small building is on a floating pontoon and houses the machinery used for loading the cross-tier and top-tier.



Stowing pine timber to form bottom tier of dram. In the background, men have begun withing.

be mentioned presently. Each intersection of this framework was fastened with a round hardwood pin or "picket" driven home and wedged. When a bottom was completed the next step was "withing"; each piece of timber in the "bottom" and the traverse as it passed above it were tied together by a withe (a small white birch sapling softened between power-rollers) twisted up tight by a lever or "toggle." The small end of the withe was made into a twisted loop which was laid against the butt of the withe; the toggle was put through this loop and used as a lever by a man who walked round and round the point of fastening. The joint being snug, the toggle was forced along the traverse and included, to hold it, in the next joint. Rows of these fastenings can be seen in the photographs; there would be about 600 to 700 of them in an average dram. From the tough elastic nature of the withes and their being evenly and snugly tied, a really extraordinary strength was developed in the whole fabric of the bottom of the dram. The cross-tier was then



Stick of timber on its way up the dram. Note the "shoe" which hangs from the "grips" and prevents the moving stick from butting against the cross-tier.



Pine timber loose in the boom. The technique of balancing on timber was quite different from that of the expert on logs, easier in some ways, harder in others.

put on; there are no photographs of this process, but there are photographs showing the loading of the top-tier in a similar manner, by steam power. The top-tier was sometimes a full tier, sometimes not. The finished three-tier pine

dram was a floating island of wood able to resist great shocks and even greater strains.

Oak timber could be rafted only one tier deep, for it had to have pine with it to keep it reasonably afloat; in other



Withing up. This process is described in the text and was a very important part of raft construction.



Loading top tier of timber on a pine dram. The man crouched on the end of the stick is holding a pair of "grips" until the pull of the steam-winch sets them. The village on Garden Island forms the background.

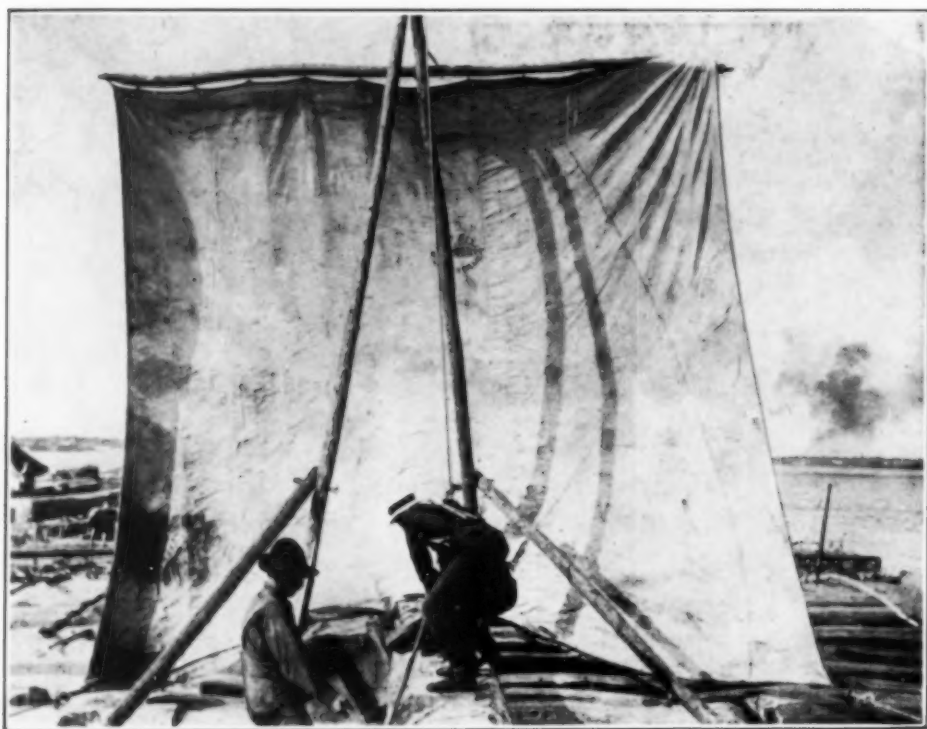
words, only a strongly buoyant bottom, of pine or elm, could carry additional tiers.

A specification of each dram was made out as it was assembled, each piece of timber having its length, girth and cubic contents recorded, and the whole

totalled up. An average pine dram would contain some 600 pieces, or about 25,000 cubic feet. All drams were 60 feet wide, their length varied from 225 feet to 300 feet, so that a raft of six or eight drams covered quite an area—big enough, in narrow waters.



General view of a raft; this was taken in 1898 and happens to show drams made of small-sized timber, hence the top-tier is a full tier.



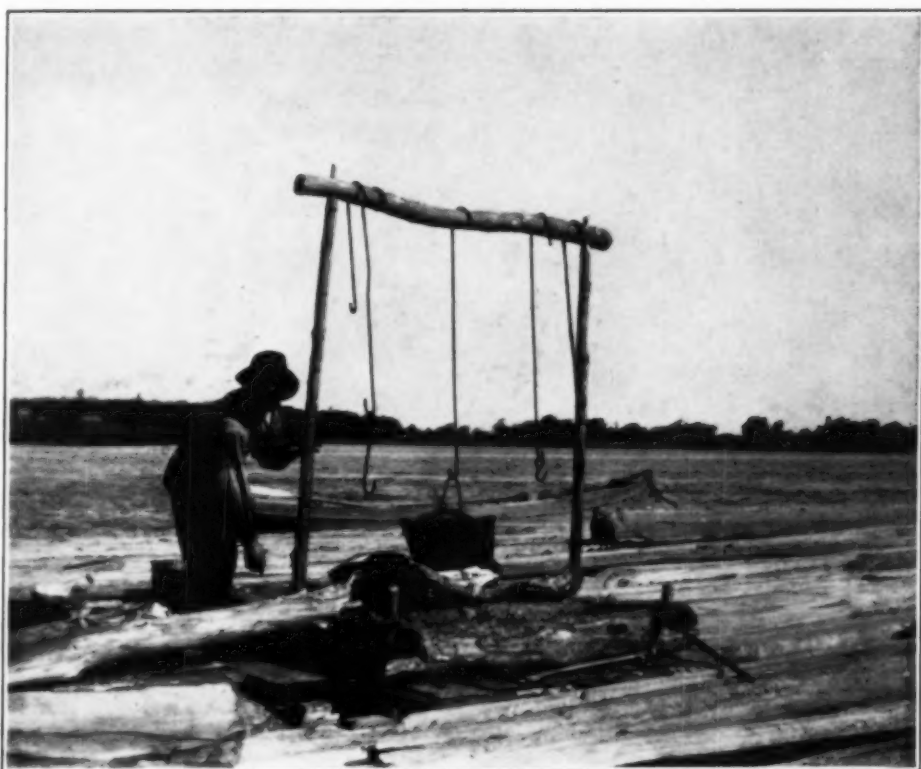
Setting a sail; the mast and its braces were made from small "traverses."

One dram, usually the first to be finished, became the leading or "cabin dram," so named because the foreman's cabin was on it. These cabins were for many years built wholly of lumber, but latterly, to save expense, they were covered with canvas. The foreman's cabin was divided into two parts, one with two bunks and a table opposite them, the other with two more bunks (on the table side) and the cookstove opposite. There was a door in each end, and a gap in the dividing partition, so that the cabin could be quite airy, or, alternatively, very hot indeed. The cook and his "boy" were the cabin builders, and great experts they were at producing liveable quarters with the simplest materials and tools. The second dram had the men's cabin built on it, a simpler structure with eight bunks.

The "raft kit" was a very varied lot of gear; the kit proper was that part of the equipment which at Quebec was stripped off and brought back on the towing steamer to Garden Island to be re-used. Two and even three kits were in use in

busy seasons. Each consisted of a couple of medium-sized anchors and their chains, a wooden windlass, sails, 150 to 200 oars 30 feet long (cut from traverses) for use in the rapids, chain of various sizes, light and heavy rope, pikepoles, axes, cant-hooks, carpenter's tools, augers, crowbars, lanterns, a boat to carry 15 or 20 men, a lighter boat, pulley blocks, cook-stove and the cook's gear packed in special boxes, blankets, straw ticks, tiny windows for the cabins, and a lot of other oddments. Besides the kit there were always put on board spare material for repairs, such as traverses, withes, toggles, pickets and other gear described earlier.

Other preparations for departure from Garden Island were taking out grub, usually in the bigger raftboat, from the company's store—salt pork, hardtack, bread, groceries; making out in the office, for the foreman, his "raft book" with the names of the crew, their dates of hiring and the state of their accounts; getting cash from the Bank in Kingston, some \$500 to \$800, chiefly to pay the extra



Cooking for the crew was done in the open air, up to about 1905. Boards, covered with ashes which were contained by the side logs, prevented damage to the timber.

men who helped in the rapids. The money was usually shoved into the straw of the foreman's mattress and left there quite unguarded. "Holdups" were unknown.

Given a fine summer day—in retrospect a raft inevitably left on a fine afternoon—it will be understood that the last hours of preparation were a delight to youngsters. The ordered confusion of getting all the gear aboard, the half-guessed secrets of the boxes and bags of grub, the characteristic scents of clean pine timber in the sun, of the raw wood of the cabins, of the fresh straw in the mattresses, combine to make a delightful memory in which the sounds are the shouts in French, the signal gong in the towing steamer's engine room and the wash from her paddle-wheels as she backed to stop alongside the raft.

At last the steamer gave us her towline, it tightened, and the raft started "with the stealth of a bad habit." For the first 20 miles, until the current

quickened in the narrows above Alexandria Bay, the speed would not be more than three miles an hour. Not much work beyond the necessary setting of lights ("navigation lights" on a raft were merely a lantern at each corner) and seeing that everything was snug, would be done the first evening, but after six o'clock breakfast next morning there was plenty of activity. Masts were put up and sails set. (It should be said here that in the earliest years sails and the river current were the only motive power, and it sometimes took weeks to get to Quebec.) Then began the fitting up of rowlocks and footholds for the rowers, really steersmen, to use in the rapids. The crew of a raft would be only 6 to 8 men, and since with good luck the Long Sault would be run the second day, there was plenty of work to keep the men busy, getting ready for the rapids.

The raft's usual running time in summer, Kingston to Montreal, was three days. Leaving one evening,



General view; this was taken about 1908. Note that the cabins are canvas tents, not wooden buildings as they had been in earlier years.

Prescott would be reached late the next evening or early the second morning. The Long Sault would be run during the second day and St. Zotique at the foot of Lake St. Francis reached that evening. Starting very early the third day, perhaps an hour before daylight, the raft

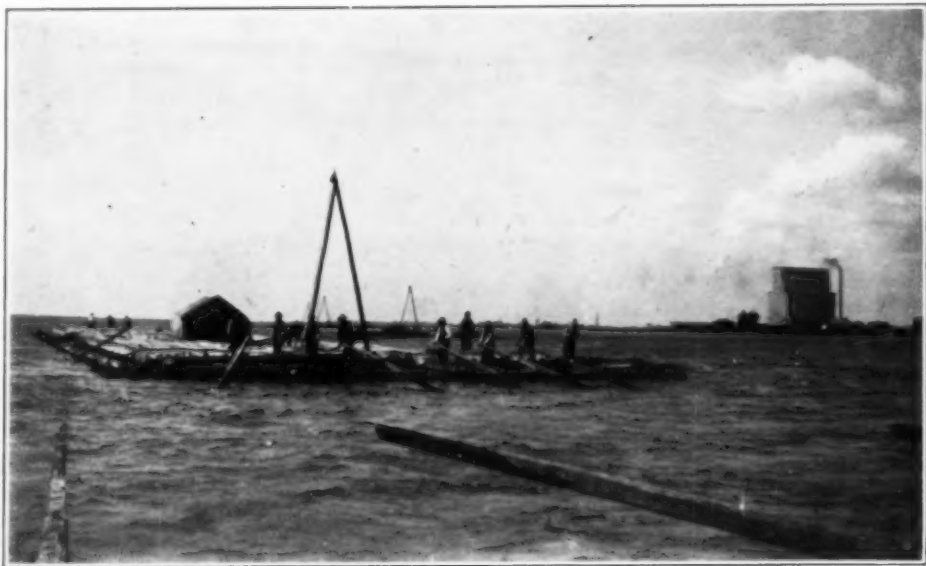
would be through the Coteau run by 9 o'clock, cross Lake St. Louis and run Lachine in the late afternoon, reaching Montreal early in the evening. This ideal schedule presumes fine and moderately calm weather; any other wind than the prevailing south and south-west breeze



The crew are getting their grub from a canvas tent; the more picturesque out-door cooking has been superseded.



The South Sault. This picture was taken in the mist of early morning from the stern or upstream end of a dram, so that one is looking towards the north—the land is the easterly end of Long Sault Island.



Drams separated out opposite Coteau Landing; four drams may be seen, the last two indicated by their masts only. In the foreground are the oars at the stern of the leading dram, which is still being towed by the steamer. The drams were separated out, first, because each dram was as big a unit as could safely run the rapids and, second, to prevent their fouling one another.



Aime Guerin, "Le Vieux," chief foreman on the Garden Island rafts 1875 to 1909. A great character, of the very best type of French-Canadian riverman.

meant tying up and waiting for a change. This was particularly true for northerly winds on the Coteau run or in Lachine. It is perhaps not necessary to add that a raft could not navigate at night except in the quiet parts of the river.

For the "passengers," life on the raft in quiet water and in fine weather was a leisurely thing indeed. Perhaps the photographs, especially the general views of the raft under way, will convey the feeling—they do so for the initiate, at any rate. The amusements were simple—fresh air, sun, sleep, food, reading, swimming, watching the raft crew at their work, they were specially handy with the axe. Then, too, there were the visitors who constantly came aboard and went a few miles with us. Sometimes, when the right men were in the crew, there would be singing, and even dancing. There is a photograph of a typical half-breed raftsman.

But the great man of the rafts which I knew was Aime Guerin, "Le Vieux," chief foreman for my grandfather and my father



Drams about to go through the railway bridge below Coteau Landing; from here down to the foot of the Cascades, 12 miles, the river's current is the only motive power.

from 1875 to 1909. Strong, capable, forceful, fearless, his relations with his employers were a perfect example of what such relations can be when there is complete loyalty and trust upon both sides. He died at his home in Laprairie very shortly after landing his raft safely in Montreal for perhaps the 500th time. The old man always spoke of "mes cages", and while he was in charge of them they were his rafts, and no mistaking the fact!

The chief reason for occasional guests on the raft was that they might see the rapids. To go down the rapids of the St. Lawrence on a passenger steamer, tourist fashion, is well worth doing; to run them in a smaller vessel would be better; but the raft showed one the real thing. The Indians' canoes never went through the really wild water, and the steamers as it were go over it, but a dram of pine timber went through, almost literally. The oak timber, rafted one tier deep and awash in quiet water, went through absolutely—a safety platform was built on each oak dram, for the rowers to climb up on. Photographs have not been made from oak timber!



Typical halfbreed raftsman; pikepole in hand: he wears high leather boots with short caulks in the soles, trousers held by a ropeyarn for belt, coloured neckerchief, battered hat, heavy woollen shirt even in hot weather—and a slowly gathering thirst being built up against paying-off in Quebec.



Reassembling the drams below the rapids.

The raft went down the Galops, below Prescott, and Rapide Plat, above Morrisburg, without being separated into its constituent drams, and with the steamer towing all the time. These two are mild affairs (fast boats can come up them against the current) but even in them the timber bumped about underfoot as the raft bent to follow the waves of the rapids, and the novice got a warning of what the really rough water would be.

through the Sault and rowed an oar, when he could. He even "taught" on the raft, if he could find a victim who had not been forewarned. I remember hearing him explaining the composition of the Milky Way to the Professor of Political Science at Queen's, who was a guest on the raft. This Long Sault crowd understood little French; Richard Dafoe the senior pilot who took down the cabin dram spoke none at all and in his deal-



In the main pitch of Lachine; this is the best picture of the series, to the eye of one who has been there on a timber dram. The men's figures give a scale to measure the long swells of the rapid. The rock in the middle of the picture is the spot from which pictures of steamers coming down Lachine are taken. The cameramen are, of course, brought up from down stream, under the lee of the rocks.

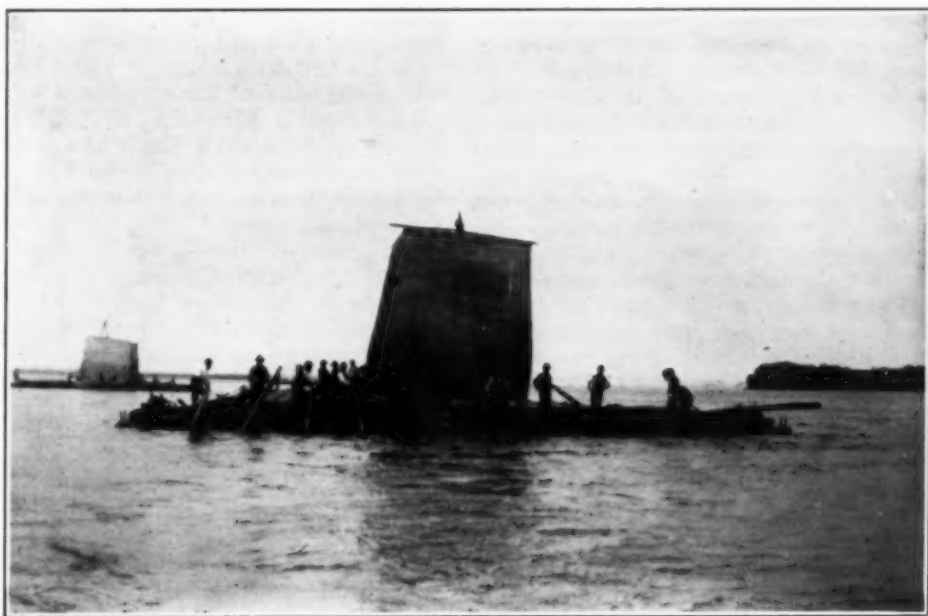
Below Rapide Plat the steamer and raft made quick progress in the strong current until above Aultsville the Long Sault pilots and their men, some 50 or so, began to come aboard the raft. These pilots were English-speaking and lived in and about Aultsville. The men were a mixed lot, Indians from the St. Regis reserve, men from the river farms on both the Canadian and American shores; one well-known figure was "the school-master" who always made the run

ings with Aime Guerin needed an interpreter. One did not always give "Rich" an exact translation of what Aime said to him when things were not going just right!

The timber drams did not run the north Sault, where the steamers go, but separated out in a long line above Cat Island, keeping to the south of Long Sault Island, in American water. This was a very pretty and little known channel, full of bends and with beautifully



Dram about to go under Canadian Pacific Railway's Lachine Bridge.



Drams above Lachine Rapids; there is a south-west breeze which is being taken advantage of by putting up the sails.



Steering, above Lachine Rapids, Ile au Heron in background. This is a good "action" picture—the men at this moment were not keeping as good time as they sometimes did, however. By rowing the opposite way at the stern, quite a quick change of direction was got. The pilot gave his orders according to "the look of the water" and by his own private landmarks, as the current took the heavy dram along.

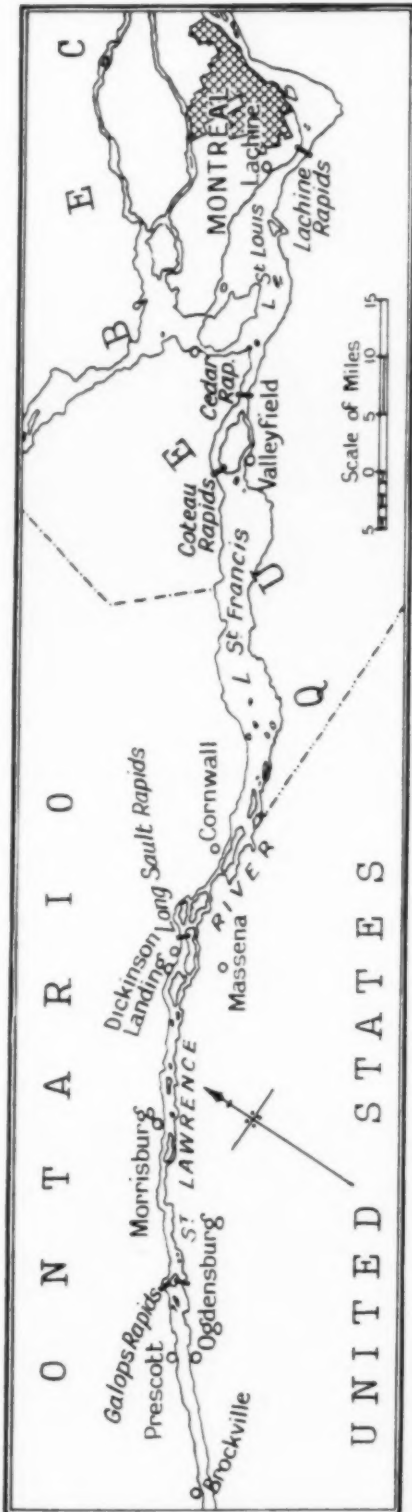
wooded banks. It took expert use of the long oars at bow and stern to make the dram take the turns. At the foot of Long Sault Island and further downstream than the main north Sault rapids, the drams went through the only sharp pitch of the south Sault.

The drams were then re-assembled, the pilots and extra men were paid off and went ashore at Cornwall, the raft went on down through the islands and out on to Lake St. Francis. Opposite Coteau Landing, the raft having received a second lot of pilots and extra men, this time all French-Canadians, the drams were again separated out by dropping them off one at a time, the steamer dropping the last one above the Canadian National Railway (then Canada Atlantic) bridge.

The leading dram soon reached the main pitch of the Coteau Rapid. There is a photograph of a dram just entering it. The raft channel here was again different from the steamer channel, this time nearer the north shore. There was

perhaps a clearer feeling of an actual drop, at this point, than in any other rapid. The next pitch is the Cedars, which has some of the roughest water in all the rapids. After another quick mile or two the Split Rock Rapid was passed, then after sharp turns right and left the Cascades, fourth and last rapid of the Coteau run, which is about 12 miles in all. Immediately below the Cascades the first of the brown Ottawa water comes into the St. Lawrence, which from here loses more and more the brilliant colour and clearness so characteristic of its upper reaches. At Cascades Point the Coteau pilots and their men left the raft in their own and the raft's boats, landing at the foot of the Soulanges canal.

And so out on to Lake St. Louis, which is smaller and deeper and has more current than Lake St. Francis. With a fair wind steamer and raft in a few hours neared Lachine, by which time the third set of pilots and men would be aboard and assigned to their duties. For



Map showing route followed by the timber rafts on their journey down the St. Lawrence.

Lachine rapids a large proportion of the men were Caughnawaga Indians. The senior pilot, a picturesque veteran called "Michel", was said to be of pure Indian blood; he wore his long black hair coiled in plaits about his head. The drams were again towed clear of one another, beginning above the Canadian Pacific Railway's Lachine bridge—a mile or so below the bridge they would be fully separated out and ready for the quick, sharp and dangerous run through Lachine Rapids. The steamer went on quickly ahead; one saw her, through field glasses, rolling and splashing in the main pitch a mile ahead of us; when she got through and "rounded to" to wait for the drams, one saw only her smoke—there is a really big drop in Lachine. And the entrance to the channel is narrow; in the swift eddying water above the rapids proper there was often some very expert steering with the 30 foot oars, old "Michel" controlling his men by a wave of his arm.

It would be interesting to know how the technique of guiding the unwieldy drams into the rapids was gradually evolved, for once in them, especially in the crooked channel of Lachine, there was a sense of being in the grip of elemental forces. The water in Lachine is very rough and very fast; the dram, bending in its whole fabric to the great swells of the rapids, and leaving great rocks close on either hand, dashed down the main pitch in a few seconds—it is an unforgettable experience. Small wonder that snapshots convey little idea of it, even the portable movie-camera, had it been invented early enough, could have got only bits of the scene, and could not have reproduced the thudding of the big timber underfoot.

But it was soon over and the day's work went on; the waiting steamer picked up her charges once more, brought them down past the Laprairie shoals, under Victoria Bridge, and through Montreal harbour.

At Montreal the Lachine pilots and their men were landed. "Le Vieux" also left the raft to go back up to "the Island" for the next one; the quieter work below Montreal could be done by lesser souls than "old Aime."

It took a whole day to tow through the crooked channel down to Sorel, so that



Lachine Rapids again, below the main pitch, but the water is still rough and fast

unless Lachine happened to have been run in the early morning the raft tied up below Montreal, about where the Vickers plant now stands, and left at daylight the next morning.

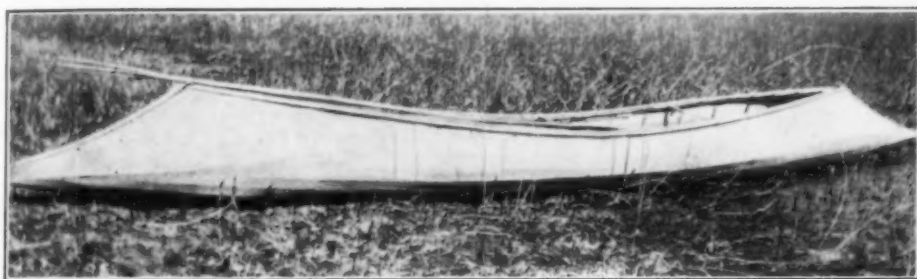
The two to four days' run from Montreal to Quebec was a lazy business in fine summer weather when all went well. But if there was bad weather on Lake St. Peter—the "Julie Plante" was not the only floating thing to get into trouble "on wan dark night on Lac St. Pierre". Or if below Batiscan, and especially below Portneuf, there was a heavy east wind with a strong flood tide, then all the skill and experience of years was called on to decide when and how to fight it out or when and how to "round to" in shelter. There were accidents, of course, both in the rapids and below Montreal, but the vast majority of the rafts were finally swung safely in on the tail of the ebb tide at the timber-cove piers at Sillery Point, five miles west of Quebec.

Not all the drams would be for the same cove, sometimes it took two or three tides (the drams could be moved only at high or low water) to berth them all at their proper coves. The raft crew

were then paid off and they headed first for the pubs and later for train or boat to get back home.

The "kit" was taken aboard the steamer; the wood cabins, all loose wood and the framework of the raft, became the prey of the covemen whose work it was to break up the raft and prepare the timber for shipment to Britain. In the great days of the square timber trade, 1850 to 1870, there would be scores of sailing ships loading in the Quebec area, from Cap Rouge down to Indian Cove, opposite Ile d'Orleans. Gradually the quantity of timber decreased, tramp steamers took the place of the timber ships, then even the tramp steamer was replaced by space in regular liners, until now the whole trade, except for small quantities of timber going direct by rail to the ship's side, has become a memory.

Perhaps the timber itself may keep alive the memory of the rafts—at any rate, years after St. Lawrence rafting ceased, one could see, along the south-east coast of England, groynes built of rock-elm timber, and find a link with the great river in deciphering the familiar bushmarks and culler's marks still legible upon their solid sides.



Guy Constable photograph.

Kootenay type canvas canoe and fish spear, Kootenay Flats, British Columbia.

The Canoe in Western Canada

By FRANK EBBUTT

THE word canoe was derived from the Caribbee word "Canava"; the Caribbees were natives of the eastern West Indies and were the first to be seen by Columbus after his first crossing of the Atlantic. Canoes of many different types were in use by the Indians of North America in pre-Columbus times, and their extensive use still survives in spite of all our modern means of transportation. The canoe is one of the very few objects of pre-white American culture to be retained by our civilization; it played a picturesque and leading role in the exploration of western Canada, the region under discussion in this article. The names of many of the most intrepid western explorers are

intimately associated with canoes and canoe travel. Names famous in Canadian history are recalled—Samuel Hearne, Alexander Mackenzie, David Thompson, Simon Fraser, Back, Richardson, Rae, Dawson, Tyrrell, Ogilvie and many others. Anyone who has been engaged in reconnaissance in the west can usually tell some thrilling canoe stories.

FRANK EBBUTT

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The word canoe to many of the younger generation and the suburban dweller has a romantic glamour, recalling quiet summer waters, big and little fish, moonlight and blue skies of summer resorts. The surveyors, geologists, engineers, prospectors, traders and trappers often use the canoe as part of the day's or even the season's work,



Type of dugout canoe in use on the Skeena River, British Columbia.



Geological Survey photograph.

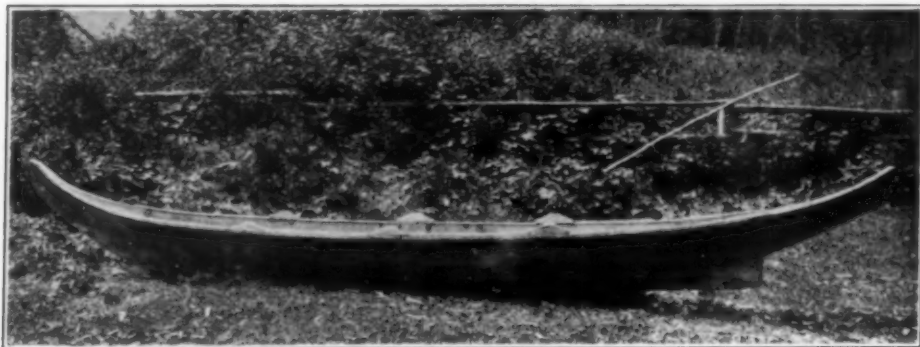
Poling a spoon canoe, Bella Coola, British Columbia.

and to them there is little glamour, for they are out in all weather on all kinds of water, on distant rivers and lakes where often a false move means quick disaster. Some persons, generally the elderly ladies, view both the name and the craft with some awe, as they would some dangerous animal; and, indeed, a canoe is a dangerous plaything in the hands of the reckless novice or the fearless small boy, yet under the hand of the expert the canoe will do almost anything but talk.



Dugout canoes and Indians preparing sea eggs (sea urchins) for dinner. These rather nauseating shell fish are eaten by the Indians with much relish. The photograph was taken at Nootka cannery, Vancouver Island.

There are many different types of canoes in western Canada; most of these have been developed of necessity like most inventions. Some are designed and built so as to be seaworthy, others are designed for speed on sheltered inland waters. In some or most, lightness is of the first importance so that they may readily be portaged. Other types are developed for poling or for carrying freight, still others for hunting or fishing or for war. Some tribes had, and in fact,

*Type of sea-going dugout canoe, Bella Coola, British Columbia.*

still have, children's canoes and women's canoes — collectively a veritable navy of small craft, each peculiarly adapted to the use to which it is put and to the available materials from which it is made. All canoes possess some grace, many are extremely graceful and seem to embody all the stream lines at their best. The smaller and lighter varieties respond to the paddle almost like a living creature anxious to serve a master.

The Hydaks or Hydaks, the natives of the Queen Charlotte Islands, were and still are the best canoe makers on the Pacific coast. They were an aggressive and warlike people with a well-developed social system. They made many types, or at least many sizes, of canoes, ranging from small one-man canoes to 60-foot war canoes carrying a crew of 16 men or more. All their canoes were dug-outs, each fashioned from a carefully-chosen giant cedar log; much time and care was given to their construction and decoration.

The tools with which these canoes were made were of jade and native copper, probably obtained by trading or raiding northwards, as there was a brisk trade in these articles between the various tribes along the Arctic coast of

both America and eastern Asia. A great deal of the work of making these canoes was accomplished by the use of fire; rocks were heated and then water poured over them, producing hot water and steam which softened the wood and permitted shaping without splitting. The larger or war canoes were equipped with sails even before these people came in contact with the white man. These sails were made of woven inner bark from the giant cedar. Paddles were commonly



National Development Bureau photograph.

Portaging in northern Saskatchewan.



National Development Bureau photograph.

Birch bark freight canoe at Fort Norman, Northwest Territories.



Geological Survey photograph.

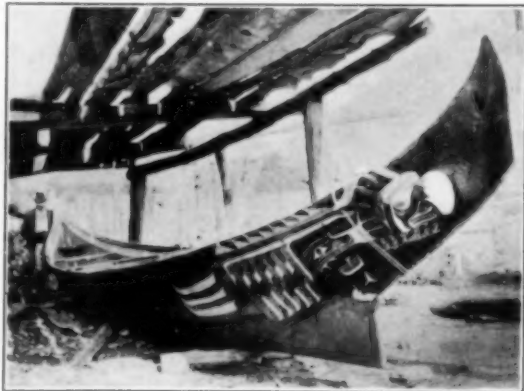
Large moose-skin boat, Gravel River. Photo by the late Joseph Keele.

made of yew, a strong and tough wood.

From their base in the Queen Charlotte Islands these Hyda people used to go on raids to the mainland and they were the terror of all mainland tribes. These raids would take them from the Aleutian Islands as far south as the mouth of the Columbia River. Some of these raids would involve journeys upwards of a thousand miles and return, and always there was the crossing of Hecate Strait, virtually part of the Pacific Ocean. Naturally foul weather was often encountered (anyone who has cruised at all in Queen Charlotte waters will know how rough it does get). Sometimes large canoes would crack up under their load in a heavy sea and the crew would be lost.

Large flotillas embarked on these forays and in order to encourage the various canoes to keep together the chief would insist on relatives being split up amongst as many canoes as possible. It was important that the "fleet" of raiding canoes be kept together as one of the greatest weapons was the element of surprise and immediate attack. Each war canoe had its captain, who acted as helmsman and wielded an extra large and highly-decorated paddle in the stern. There was also a man with a drum who

by slow or rapid beating controlled the speed as the paddlers kept time to the drum. The bows of the larger of these war canoes were grotesquely carved, and in some the thwarts were carved. All the fighting men wore armour made of rawhide from sea lions; this armour was worn only on the front of the body as their backs were never to be exposed to an enemy. The Hydats took many prisoners of both sexes, many of these becoming slaves while the more comely young women served as extra or supernumerary wives to the chief and prosperous men of the tribe.



Geological Survey photograph.

Haida type of war canoe, Bella Coola, British Columbia.



Spoon type of dugout canoe, Bella Coola, British Columbia.

The Mackenzie River System, which has the Athabaska, Peace, Slave, Hay, Liard, Gravel and Great Bear Rivers as its chief tributaries, affords one of the longest and most interesting canoe trips in the world. Collectively these rivers run to several thousand miles of "high-way" suitable for canoe travel. On these waters a great variety of native canoes may be found, ranging all the way from rather clumsy cottonwood dugouts to various spruce and birchbark types and even skin-covered ones. Gradually, as the high latitudes are reached, the designs approach the Eskimo kayak. The rivers of the north are still the main arteries of both trade and travel in winter and summer. The many though scattered "posts" or "forts" of the trading companies are invariably situated at strategic points on these main rivers or

lakes, the choice position usually being at the junction of two main streams or near where a main tributary enters a large lake. The deltas of most of these rivers are desolate, sandy, wind-swept areas, beset with partially-buried snags and driftwood.

The almost countless lakes of British Columbia, the Yukon, the North West Territories and the northern portions of Alberta and Saskatchewan are ideal for canoe travel, and many canoe "cultures" have developed on their margins and a great number of types of canoes are found. One of the most interesting of these is the Kootenay canoe; as far as the writer knows, it is unique in America but a similar model has been noted on the Amur River, which forms the boundary between Manchuria and Eastern Siberia and empties into the Sea of



Various birch bark canoes, Mackenzie River.

Akhotsk. It is common knowledge that there is a similarity between the western North American Indians and the eastern Asiatic peoples and undoubtedly intermittent migrations of nomadic Asiatic tribes reached North America via the Aleutian Islands from time to time. The Kootenay canoe was originally made of birch bark, but in recent years canvas has replaced the bark. The construction, however, is much different from the other types of bark canoes. The framework of cedar slats is made in such a way that there is a ram-like bow and

which are a rendezvous for many kinds of water fowl both in spring and fall. The paddler in the Kootenay canoe sits on a mat made of rushes and paddles first on one side and then on the other, three or four short strokes; each time he changes sides a little water drips from the paddle on the duffle or occupants.

Some of the smaller types of dugout canoes, as used on such lakes as Lilloet, Seaton and Anderson Lakes in British Columbia are unseaworthy in anything but a dead calm. They quickly become water-logged and as the bows are low



Photograph by late Joseph Keele.

Small moose-skin boat, Gravel River.

stern, and the canoe is about three feet longer on the water-line than at the gunwale; this reduces the surface exposed to the winds and largely overcomes the tendency to drift or swing in the face of a squall, to which many bark canoes are prone. The ram-like bow of a canoe of this sort enables the canoeman to work the craft into reeds or marshes with a minimum disturbance while duck or goose hunting. The Kootenay Indian spends much of his time to good profit in this manner as the Kootenay Flats, in British Columbia, abound in marshes

the smallest of waves becomes a serious problem if one desires to remain dry.

About the Gulph Islands of the Strait of Georgia, which separates Vancouver Island from the mainland, are the remnants of a group of Kanakas (natives of the Sandwich Islands) who were imported as colonists by the Hudson's Bay Company in the early days. These people have mingled freely with the local Indians and have perhaps had some influence on the canoe types seen today in these waters.





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ORDERS AND INQUIRIES ABOUT BOOKS REVIEWED HERE SHOULD BE ADDRESSED TO THE BOOK PUBLISHERS

The Lives of a Bengal Lancer. By F. Yeats-Brown. New York: The Viking Press. 1930. \$2.75.

In Lowell Thomas's book on India, reviewed some time ago in these columns, he acknowledges that anything he had learned about the real life of India he owed to Yeats-Brown. Rabindranath Tagore, Hugh Walpole and William McFee, though they may not have much else in common, unite in high praise of this story of the life and adventures of a Bengal Lancer. Major Yeats-Brown combines in one small book an amazing range of experiences, with a Cavalry corps on the North West Frontier, impressions of the bazaars of Pushtu, the saddhu and the King Cobra, Pole at a hill station, pig-sticking, the festival of the Fish-Eyed Goddess, Juggernaut and the pilgrims, the Mahatma who drew scent out of the air, the Temple of the Undistracted Mind, the doctrine of Yoga. The charm of his style may be gathered from the following fragment: "On the crescent that crowns the dome of Mumtaz's tomb, the heralds of the morning had come. Where I stood it was dark, but the dome had begun to glow like a pearl, like a monstrosity above an altar. For me it was a symbol of the unity of worlds visible and invisible. One greater than Mumtaz was there, Unity itself.

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Leif Eriksson, Discoverer of America. By Edward F. Gray. Toronto: Oxford University Press. 1930. \$7.50.

There was a time when many otherwise well-informed people refused to accept the Icelandic narratives of the Vinland voyages as anything more than fairy tales. Even so eminent an authority as Nansen regarded them as nothing more than legends. Since then scholars on both sides of the Atlantic have, with very few exceptions, accepted the voyages as authentic. Where most of them have differed is in locating the three places mentioned by Leif,—Helluland, Markland and Vinland, and particularly

the latter. Thordarson, whose book was reviewed in these columns not long ago, found Vinland in New England. Mr. Gray is much more definite. He has convinced himself that Vinland was the region in and about Nantucket Sound. To prove his contention he brings together a wealth of evidence that, if not convincing, is decidedly interesting.

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Hunting the Alaska Brown Bear. By John W. Eddy. New York: G. P. Putnam's Sons. 1930. \$3.50.

In the remote north-west, where America sends a finger out toward Asia, survives the greatest of all the bears, the largest carnivorous animal in the world, the Brown Bear of Alaska. If it were not for Mr. Eddy's photographs it would be difficult to believe that such a monster lived on this continent. Because his home is so peculiarly inaccessible the Big Brown Bear has seldom been hunted, and beyond an occasional magazine article this is the first attempt to describe him, his manners and customs, and his remote home on the slopes of Pavlof volcano. The book makes fascinating reading because the writer is not only a big game hunter but one who is keenly interested in the ways of wild animals, and who knows how to tell a good yarn.

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Manchuria Today. By Henry W. Kinney. Dairen. 1930.

This book "is designed to present briefly the principal features of the economic situation in Manchuria, with special reference to the activities and aims of the South Manchuria Railway Company." That railway, it will be remembered, is controlled by Japan, and is one of the most important factors in the advancement of her aims and policies in Manchuria. The book deals with the geography and climate of Manchuria, its history, Japan's activities and policies, the development of modern facilities, trade, agriculture, railways, industries. It is very well illustrated.